

## 1.27mm Center Flat Ribbon Cable IDC Connectors

A  
DHD

- High density board to cable (with DHB series) connections

## FEATURE

- 1.27mm center IDC connectors for 0.635mm pitch flat ribbon cable (AWG 28 or 30)
- Highly-reliable, scoop-proof cantilever contact design
- “D”-shape shell polarization to eliminate connector mis-mating
- Bi-level IDC termination design for reliable connection
- Open ended rear cover design for daisy chain applications
- Space saving mating lock design
- Intermateable with half-pitch (1.27mm center-line) DHB series board mounting connectors

## SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 500V DC
Contact resistance	35m $\Omega$ max. at 10mA DC

## MATERIAL/FINISH

Contact	Copper alloy/Gold over Nickel plating
Insulator	Plug: PBT resin (UL94V-0)
	Socket: Polyamide resin (UL94V-0)

## APPLICABLE CABLES

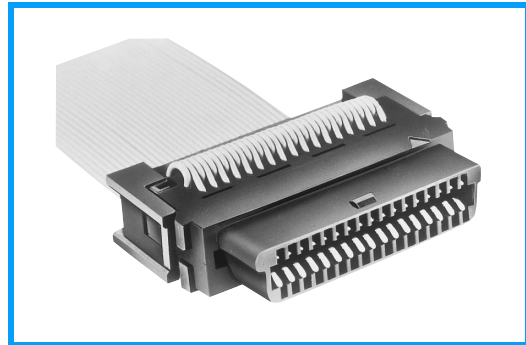
AWG#30 or #28 flat ribbon cables

## Receptacles (Friction Lock Type)

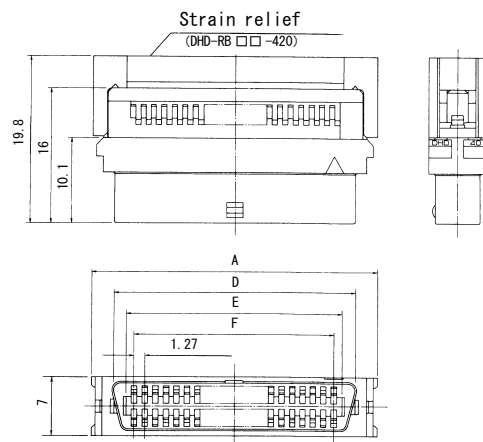
### DHD-RB50-30AN

**NO. OF CONTACTS**  
26, 34, 40, 50, 60, 68

**STRAIN RELIEF**  
N: Without strain relief  
S: With strain relief



P/N	NO. OF CONTACTS	A	D	E	F
DHD-RB26-□OA□	26	25.49	20.29	17.14	15.24
DHD-RB34-□OA□	34	30.57	25.37	22.22	20.32
DHD-RB40-□OA□	40	34.38	29.18	26.03	24.13
DHD-RB50-□OA□	50	40.73	35.53	32.38	30.48
DHD-RB60-□OA□	60	47.08	41.88	38.73	36.83
DHD-RB68-□OA□	68	52.16	46.96	43.81	41.91

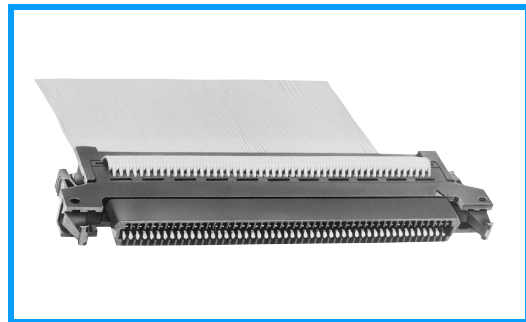


## Receptacles (Lock Lever Type)

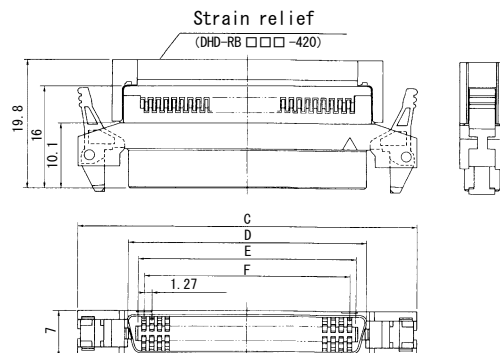
### DHD-RA50-30AN

**NO. OF CONTACTS**  
34, 50, 68, 80,100

**STRAIN RELIEF**  
N: Without strain relief  
S: With strain relief



P/N	NO. OF CONTACTS	G	D	E	F
DHD-RA34-30A□	34	41.26	25.37	22.22	20.32
DHD-RA50-30A□	50	51.42	35.53	32.38	30.48
DHD-RA68-30A□	68	62.85	46.96	43.81	41.91
DHD-RA80-30A□	80	70.47	54.58	51.43	49.53
DHD-RA100-30A□	100	83.17	67.28	64.13	62.23



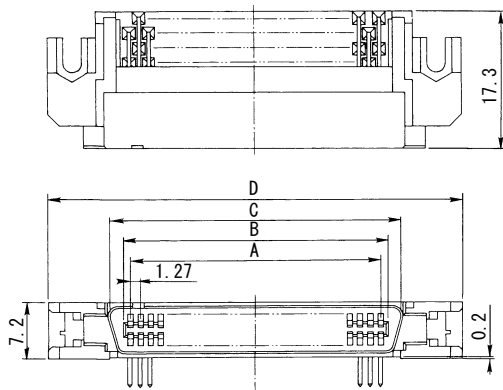
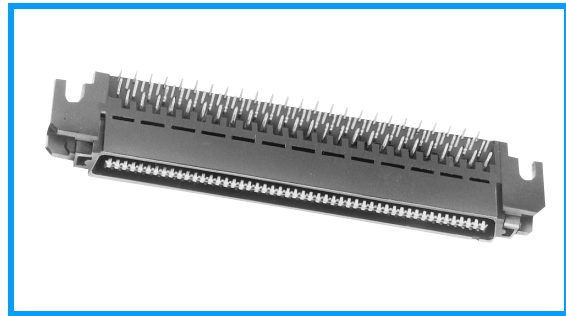
## Right Angle Plug

### DHD-PA 100-R13NNO

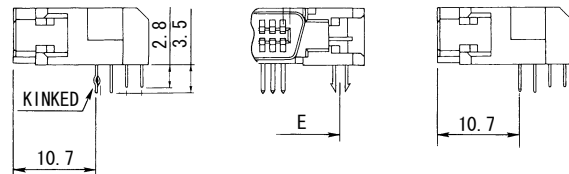
**NO. OF CONTACTS**  
34, 50, 68, 80, 100

**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel

**SNAP-IN MOUNTING CLIP**  
N: Without snap-in clips  
1: With snap-in clips



P/N	NO. OF CONTACTS	A	B	C	D	E
DHD-PA34-R13□NO	34	20.32	22.12	25.47	41.26	34.86
DHD-PA50-R13□NO	50	30.48	32.28	35.63	51.42	45.02
DHD-PA68-R13□NO	68	41.91	43.71	47.06	62.85	56.45
DHD-PA80-R13□NO	80	49.53	51.33	54.68	70.47	64.07
DHD-PA100-R13□NO	100	62.23	64.03	67.38	83.17	76.77

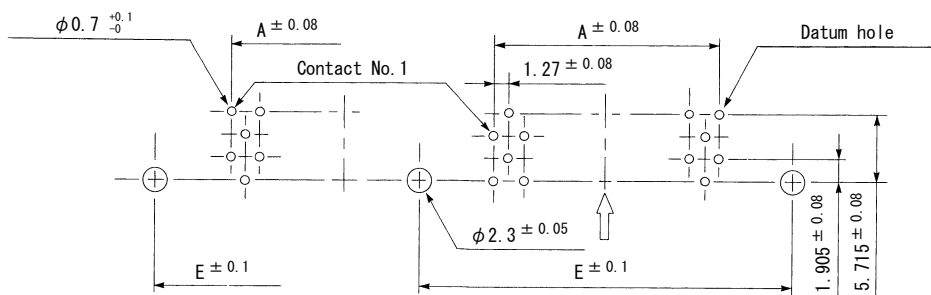


Without snap-lock pin

With snap-lock pin

34, 50 contacts

68, 80, 100 contacts



PCB mounting dimensions  
(Connector-mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (for snap-in clipmounting)  
 $1.6^{±0.19}$  (for screw mounting)

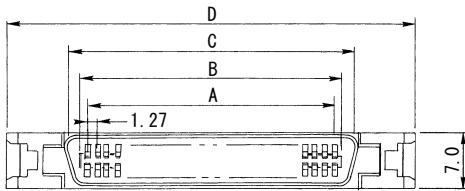
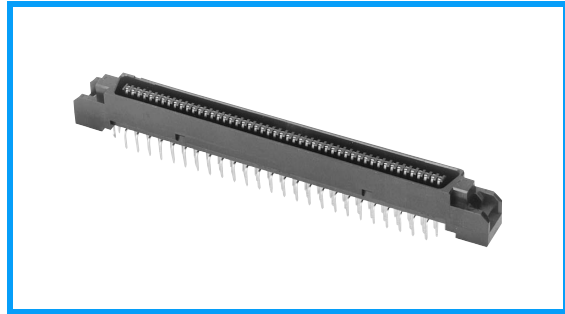
■ Straight Plug

DHD-PB100-R13NNO

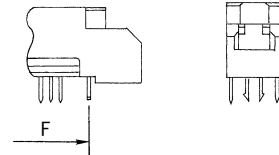
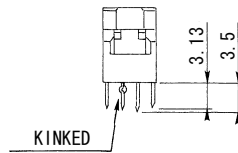
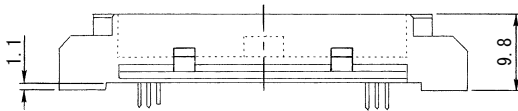
**NO. OF CONTACTS**  
50, 68, 80, 100

**SNAP-IN MOUNTING CLIP**  
N: Without snap-in clips  
1: With snap-in clips

**CONTACT PLATING**  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel



P/N	NO. OF CONTACTS	A	B	C	D	E
DHD-PB50-S13□NO	50	30.48	32.28	35.63	51.42	37.59
DHD-PB68-S13□NO	68	41.91	43.71	47.06	62.85	49.02
DHD-PB80-S13□NO	80	49.53	51.33	54.68	70.47	56.64
DHD-PB100-S13□NO	100	62.23	64.03	67.38	83.17	69.34

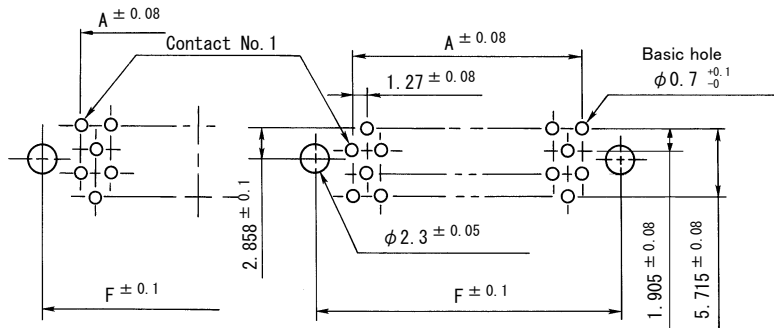


Without snap-lock pin

With snap-lock pin

50 contacts

80, 100 contacts



PCB mounting dimensions  
(Connector-mount side)

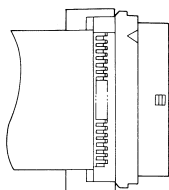
PCB thickness:  $1.6^{+0.19}_{-0.1}$  (for snap-in clipmounting)  
 $1.6 \pm 0.19$  (for screw mounting)

## INTERMATEABILITY DIAGRAM

A  
DHD

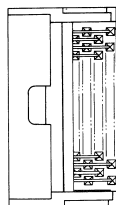
### With Friction Lock

#### Receptacles

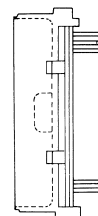


DHD-RB26  
DHD-RB34  
DHD-RB40  
DHD-RB50  
DHD-RB60  
DHD-RB68

#### Plugs



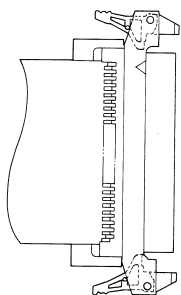
(90° PCB mounting)  
DHB-PA34  
DHB-PA40  
DHB-PA50  
DHB-PA60  
DHB-PA68



(Straight PCB mounting)  
DHB-PB26  
DHB-PB34  
DHB-PB40  
DHB-PB50  
DHB-PB60  
DHB-PB68

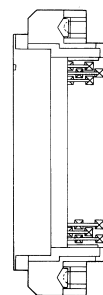
### With Locking Lever

#### Receptacles

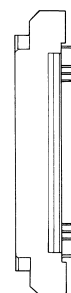


DHD-RA24  
DHD-RA50  
DHD-RA68  
DHD-RA80  
DHD-RA100

#### Plugs



(90° PCB mounting)  
DHD-PA34  
DHD-PA50  
DHD-PA68  
DHD-PA80  
DHD-PA100



(Straight PCB mounting)  
DHD-PB50  
DHD-PB68  
DHD-PB80  
DHD-PB100

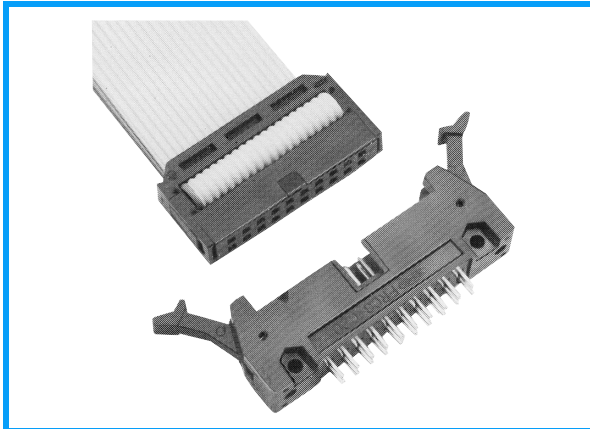
### Cable Assembly Tool

P/N	Tool NAME
357J-15293	Cable cutting tool
357J-10236	Cover termination tool
357J-10721	Attachment for cover termination
357J-10237	Final termination tool
357J-12099-3	Press for DHD-RB26 to 68 and DHD-RA80&100
357J-12099-2	Press for DHD-RA60&68
357J-12099-1	Press for DHD-RA34&50

## High Current Version for 2-Piece Connectors

B

FRC3



- FRC3 series is of the current capacity 3A and contact pitch 3.175mm .

### FEATURE

- Number of contacts : 16, 20, 34
- Applicable cable : Cable pitch 1.59mm  
AWG 24 (solid and stranded)

## SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	3A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	1000M $\Omega$ min. at 500V DC
Contact resistance	15m $\Omega$ max.
Operating temperature	-55°C to +105°C

## MATERIAL/FINISH

Socket	Housing	Polycarbonate resin (UL94V-0)
	Cover	Polycarbonate resin (UL94V-0)
	Contact	Copper alloy/Gold over Nickel plating
	Strain Relief	Polyamide resin (UL94 V-0)
Header	Block	PBT resin (UL94V-0)
	Contact	Copper alloy/Gold over Nickel plating

## Socket

### FRC3-A020-10S

**COVER STYLE**

0 : Open end Cover

**NO. OF CONTACTS**

16, 20, 34

**CONTACT PLATING**

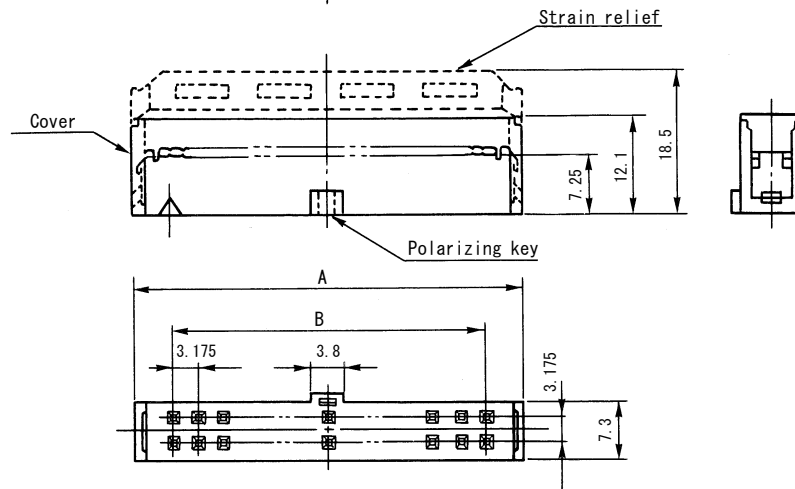
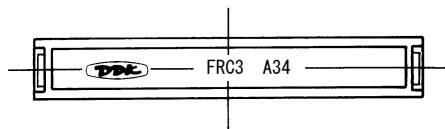
- 1 : 0.8  $\mu$  Gold over Nickel
- 2 : 0.4  $\mu$  Gold over Nickel
- 3 : Gold flash over Nickel

**STRAIN RELIEF**

No designation : Without strain relief  
(for header with short locks)  
S : With strain relief  
(for header with long locks)

**POLARIZING KEY**

0 : 16, 20, 34.....1 key



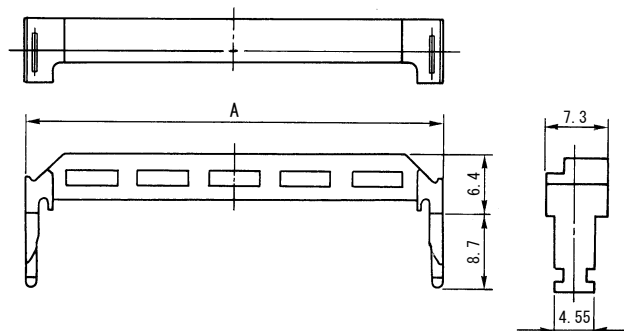
NO. OF CONTACTS	A	B
16	32.03	22.225
20	38.38	28.575
34	60.60	50.800

## Strain Relief

### FRC3-20-04

**NO. OF CONTACTS**

16, 20, 34



Header

B  
FRC3

FRC3-C20S11-0L

**NO. OF CONTACTS**  
16, 20, 34

**CONTACT TAIL STYLE**  
L : Right angle  
S : Straight

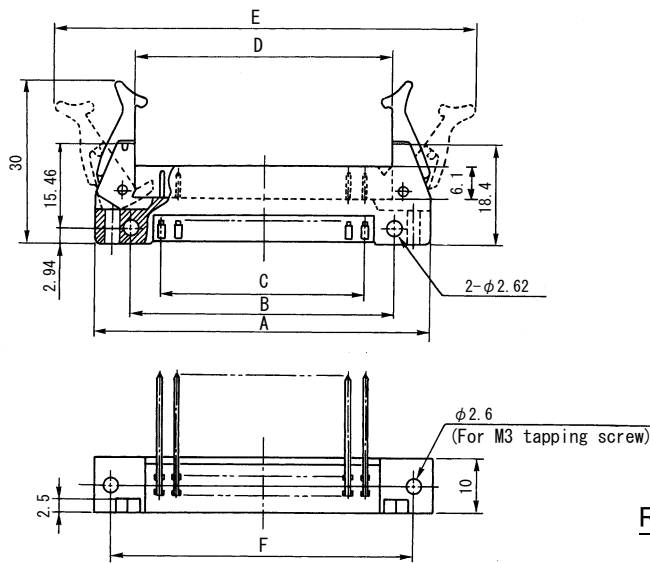
**CONTACT TAIL LENGTH**  
1 : 3.6mm  
2 : 15mm

**LOCK LEVER**  
L : Long (for socket with strain relief)  
S : Short (for socket without strain relief)

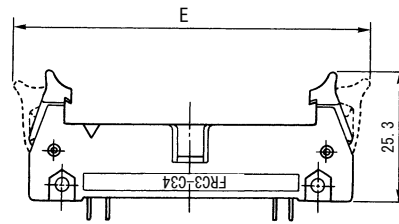
**KEY SLOT**  
0 : 16, 20, 34.....1 key

**CONTACT PLATING**  
1 : 0.8 μ Gold over Nickel  
2 : 0.4 μ Gold over Nickel  
3 : Gold flash over Nickel

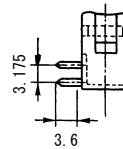
Header with long locks



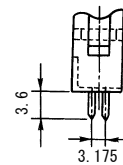
Header with short locks



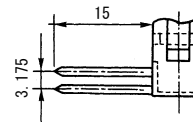
Right angle DIP



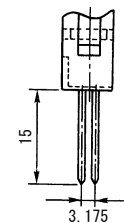
Straight DIP



Right angle wrapping



Straight wrapping

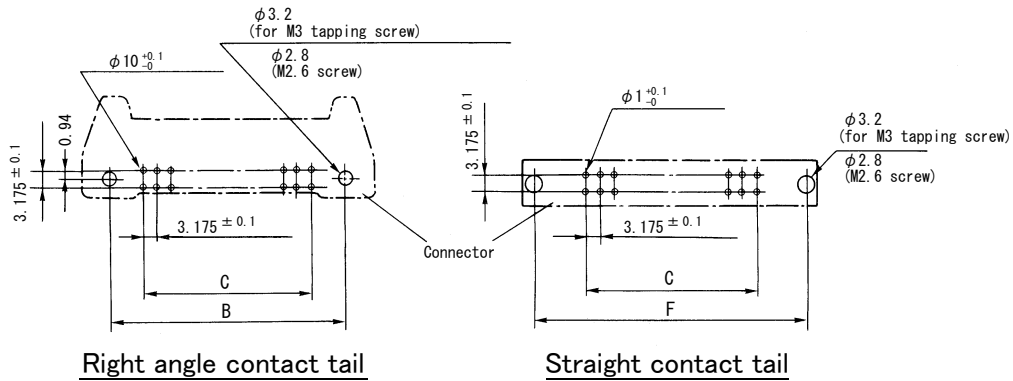


NO. OF CONTACTS	A	B	C	D	E		F
					S locks	L locks	
16	46.56	36.60	22.225	32.23	57.20	63.6	39.85
20	52.90	39.88	28.575	38.58	63.50	70.0	46.20
34	75.13	62.10	50.800	60.80	85.70	92.2	68.43



## PCB Mounting Dimension

B  
FRC3



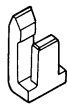
### ■ Polarizing Key for Sockets

### ■ Key Guide for Header

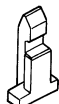
## HU-005

Material·····Polyamide resin (UL94V-0)

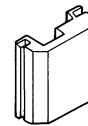
The HU-005 is attached to the socket.  
A pair of HU-005 consists of an HU-005-1 and an HU-005-2.



HU-005-1



HU-005-2



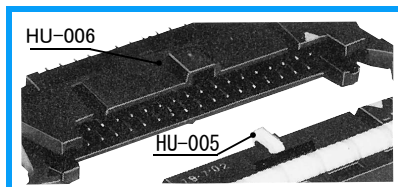
HU-006

## HU-006

Material·····Polycarbonate resin (UL94V-0)

The HU-006 is attached to header.

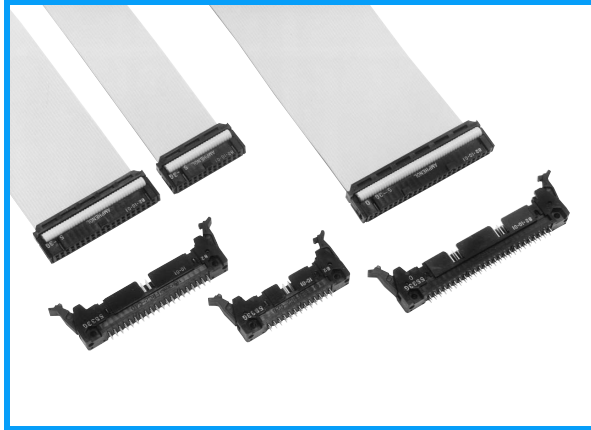
Note : If connectors having same number of contacts are used side by side, wrong insertion between adjacent connectors can be prevented.



## Cable Assembly Tools

Cable cutting tool P/N : 357J-4256, Termination tool P/N : 357J-4674D (press)  
P/N : 357J-4669 (attachment)

## MIL-C-83503 Compatible UL Recognized (File NO.E72124)



- FRC5 series is a family of DDK FRC series delivering laborsaving feature in cable termination, and it meets the MIL Standard.

### FEATURE

- UL recognized component (File NO. E72124)
- MIL-C-83503 compatible
- The header is of a double-wall type which prevents completely mis-mating.
- Number of contacts : 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64

## SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	1A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	1000M $\Omega$ min. at 500V DC
Contact resistance	15M $\Omega$ max.
Operating temperature	-55°C to +105°C
Applicable cable	AWG#28 (stranded, solid) AWG#30 (solid)

## MATERIAL/FINISH

Socket	Housing	PBT resin (UL94V-0)/Black
	Cover	PBT resin (UL94V-0)/Black
	Contact	Copper alloy/Gold over Nickel plating
	Strain relief	PBT resin (UL94V-0)/Black
Header	Block	PBT resin (UL94V-0)/Black
	Contact	Copper alloy/Gold over Nickel plating
	Lock	PBT resin (UL94V-0)/Black
	Spring Pin	Stainless Steel

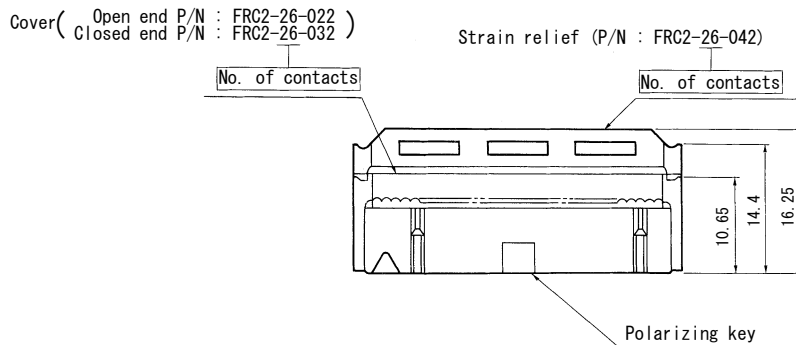
## Socket

### FRC5-A026-3TOS

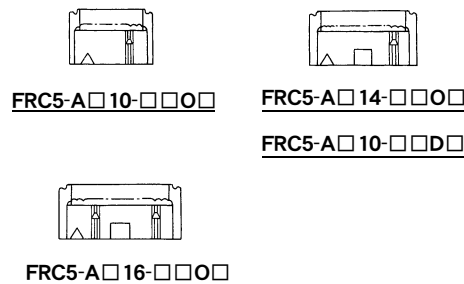
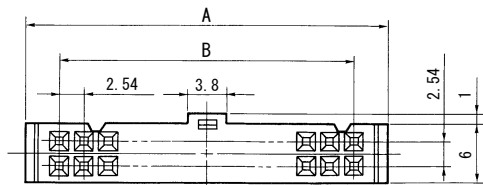
<b>CONNECTOR STYLE</b> A : Socket		<b>STRAIN RELIEF</b> N : without strain relief (for header with short locks) S : with strain relief (for header with long locks)
<b>COVER STYLE (Note)</b> O : Open end Cover A : Closed end Cover		<b>POLARIZING KEY</b> O : 10..... NO key 14, 16, 20, 26, 30, 34, 40... 1 key 50, 60, 64..... 2 key (H=22.86mm) A : 50, 60, 64..... 1 key C : 60..... 2 keys (H=27.94mm) D : 10..... 1 key
<b>NO. OF CONTACTS</b> 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64		<b>CONTACT REAR PLATING</b> T : Pb-Sn plating.
<b>CONTACT PLATING</b> 1 : 0.8 μ Gold over Nickel 2 : 0.4 μ Gold over Nickel 3 : Gold flash over Nickel		



Note : The cover for 64 pins is an open end type only; a closed end type is not available

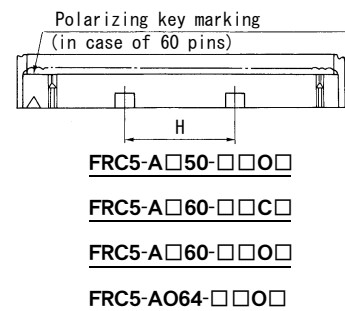


NO. OF CONTACTS	A	B
10	17.27	10.16
14	22.35	15.24
16	24.89	17.78
20	29.97	22.86
26	37.59	30.48
30	42.67	35.56
34	47.75	40.64
40	55.37	48.26
50	68.07	60.96
60	80.77	73.66
64	85.85	78.74



FRC5-A□20~A□40-□□□□

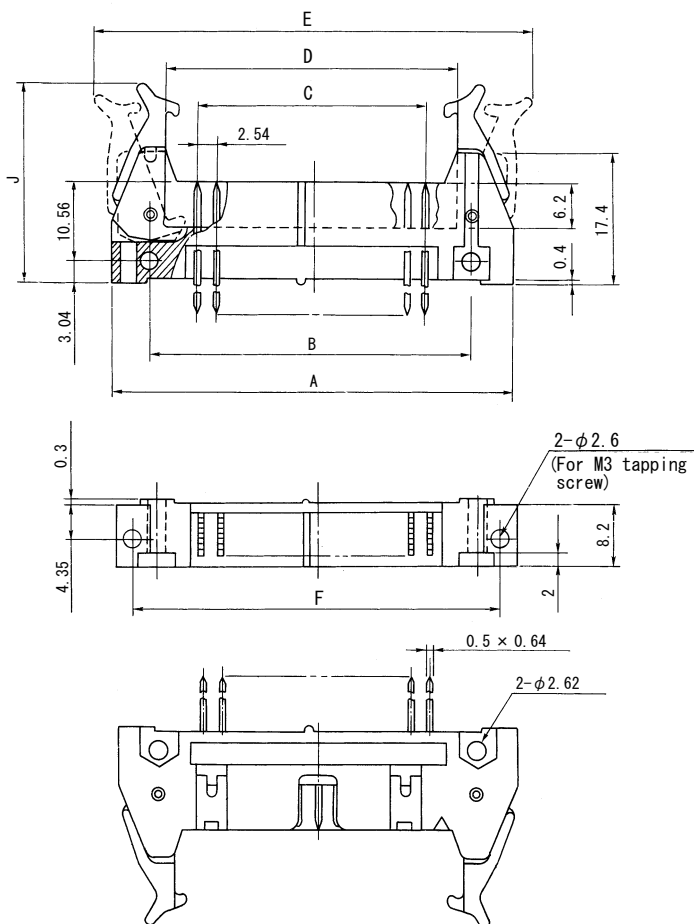
FRC5-A□50~A□60-□□A□



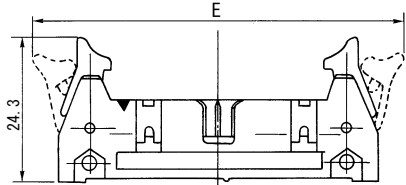




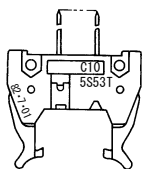
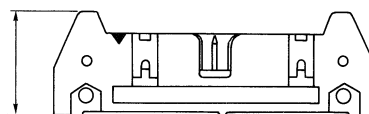
Header with long locks



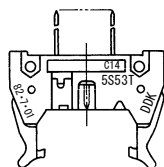
Header with short locks



Header without a lock

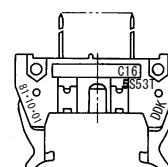


FRC5-C10□□□□-O□



FRC5-C14□□□□-O□

FRC5-C10□□□□-D□



FRC5-C16 to FRC5-C40□□□□-O□

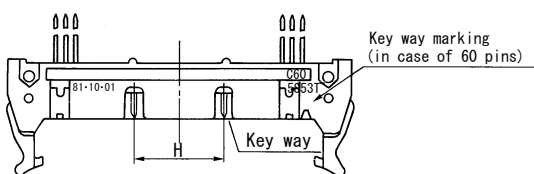
FRC5-C50 to FRC5-C60□□□□-A□

FRC5-C50□□□□-O□

FRC5-C60□□□□-C□

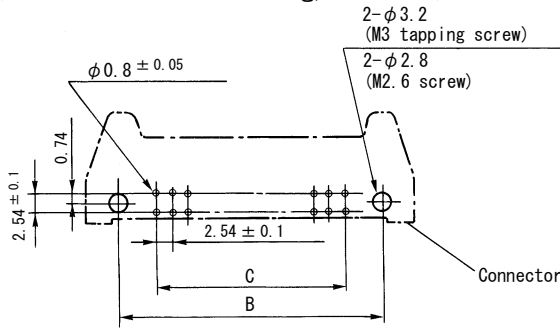
FRC5-C60□□□□-O□

FRC5-C64□□□□-O□

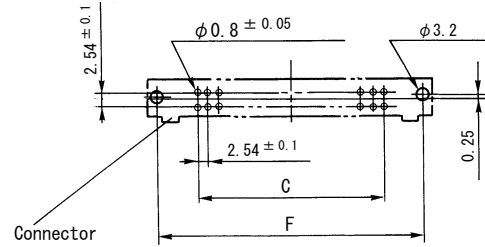


PCB Mounting Dimensions

(as Viewed from Soldering, DIP Side)



Right angle contact tail

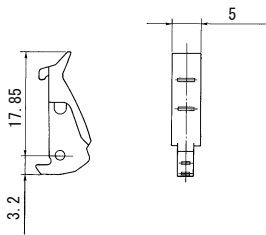


Straight contact tail

■ Long Lock

FRC2-01

Material···PBT resin (UL94V-0)



■ Spring Pin

FRC-03

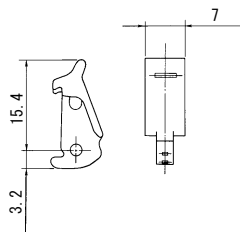
Material···Stainless steel



■ Short lock

FRC2-02

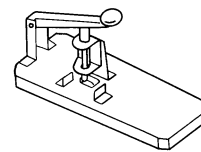
Material···PBT resin (UL94V-0)



Tool

357J-4502

Use this tool when removing or replacing the lock lever.



# FRC5 Series

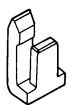
Unit : mm

## ■ Polarizing Key for Socket

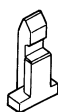
### HU-005

A pair of HU-005 consists of an HU-005-1 and an HU-005-2

MATERIAL/FINISH·····Polyamide resin (UL94V-O)/natural color



HU-005-1

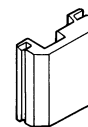


HU-005-2

## ■ Key Guide for Header

### HU-006

MATERIAL/FINISH·····Polycarbonate resin (UL94V-O)/black



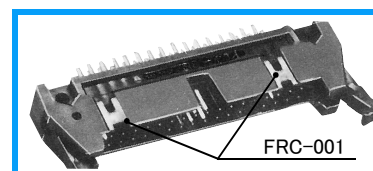
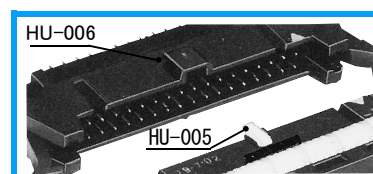
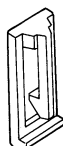
HU-006

C  
FRC5

## ■ Polarizing Guide for Header

### FRC-001

MATERIAL/FINISH·····Polyamide resin (UL94V-O)/natural color



Note : If connectors having same number of contacts are used side by side, wrong insertion between adjacent connectors can be prevented. However, these components are not applicable to 10-pin keyless, or 16-pin connectors.

## Cable Assembly Tools

Cable cutting tool P/N : 357J-4256, Termination tool P/N : 357J-4674D (press)

P/N : 357J-4664N (attachment)

## Metal Hood FRC5 Series Shielded Type for EMI Suppression



The FRCE series hood is used for the FRC5 series socket connectors.

It is made of aluminum alloy. It provides complete EMI protection to the connectors.

- Applicable connectors : No. of contacts 26, 34, 50

FRC5-Ax26-xTON, FRC5-Ax34-xTON, FRC5-Ax50-xTxN

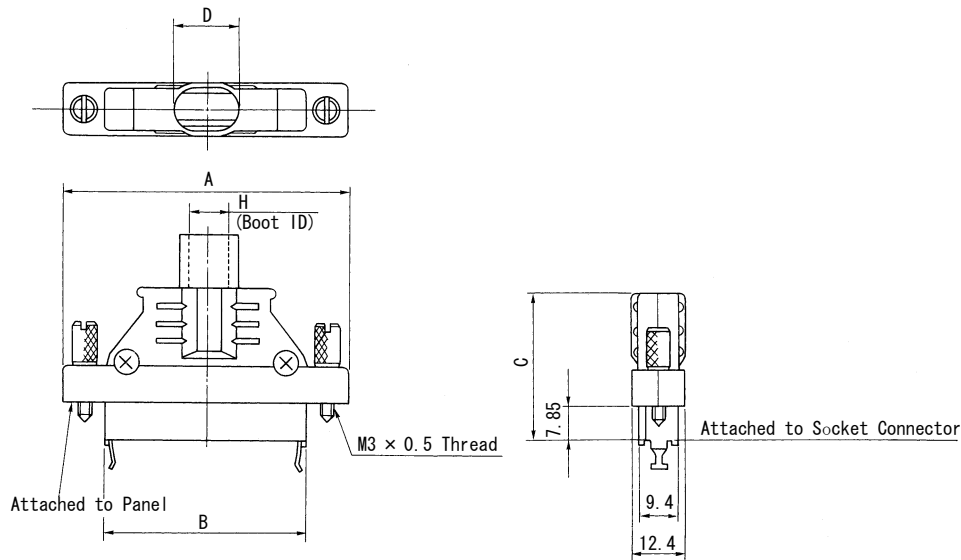
- The mating connector of the FRCE series socket with hood is a header without a lock.

FRC5-C26xxxT-ON, FRC5-C34xxxT-ON,  
FRC5-C50xxxT-xN

## MATERIAL/FINISH

Hood	Aluminum cast/Non-conductive paint finish (color : gray)
Lock screws	Steel/Nickel plating
Cable clamp	Steel/Nickel plating
Clamp clip	Steel/Nickel plating

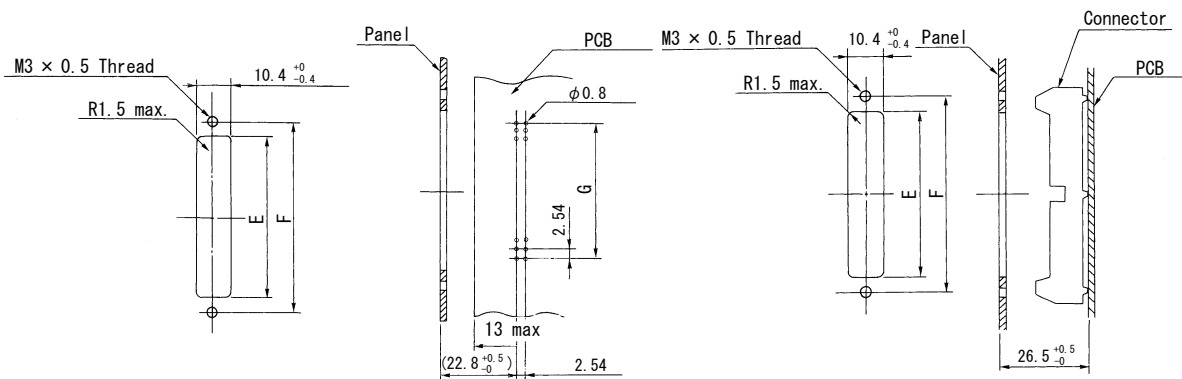




D  
FRCE

P/N	A	B	C	D	E	F	G	H
FRCE-26H1	57.6	37.59	35	10 × 13	38.60	47.60	30.48	10.5
FRCE-34H1	67.76	47.75	35	10 × 15	48.76	57.76	40.64	11.0
FRCE-50H1	88.08	68.07	40	10 × 18	69.08	78.08	60.96	13.0

## Panel and PCB Mounting Dimensions



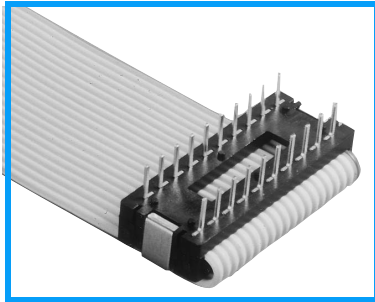
Right angle header

Straight header

# FRC-D, FRC-E, FRC-J Series

PCB Connectors for Flat Cables UL Recognized (File No. E72124)

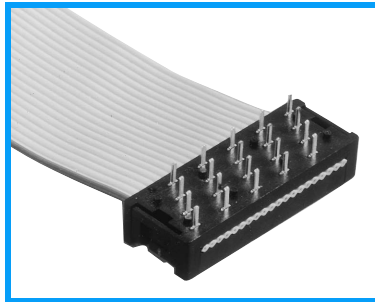
## FRC-D Series (IC type)



The FRC-D series is suitable for connection on the PCB, and between PCB and PCB. The contact pitch and row pitch are same as standard IC, and therefore it can be mated with the IC socket.

- Number of contacts  
14, 16, 20, 24, 40, 64

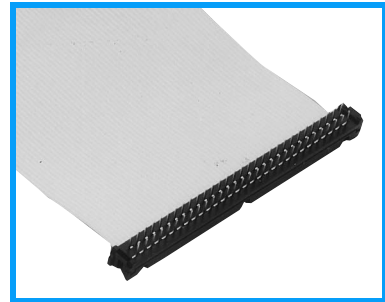
## FRC-E Series (PCB type)



The FRC-E series is suitable for connection on the PCB, and between PCB and PCB. The contact arrangement is 4 rows.

- Number of contacts  
20, 26, 30, 34, 40, 50, 60

## FRC-J Series (PCB type)



The FRC-J series is suitable for connection on the PCB, and between PCB and PCB. The contact arrangement is 2 rows (2.54mm grid).

- Number of contacts  
10, 16, 20, 26, 30, 34, 40, 50, 60

## SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	1A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	1000M $\Omega$ min. at 500V DC
Contact resistance	15m $\Omega$ max.
Operating temperature	-55°C to +105°C
Applicable cable	Cable pitch 1.27mm AWG #28 (stranded, solid) AWG #30 (solid)

## MATERIAL/FINISH

Base	PBT resin (UL94V-O)/Black
Cover	PBT resin (UL94V-O)/Black
Contact	Copper alloy/Gold over Nickel plating or Pb/Sn plating

E

FRC-D,E,J

# FRC-D Series

Unit : mm

## FRC-D 14R-30S

**NO. OF CONTACTS**  
14, 16, 20, 24, 40, 64

**CONTACT ARRANGEMENT**  
No designation : Standard  
R : Reverse

Reverse type for 20 contacts is not available.

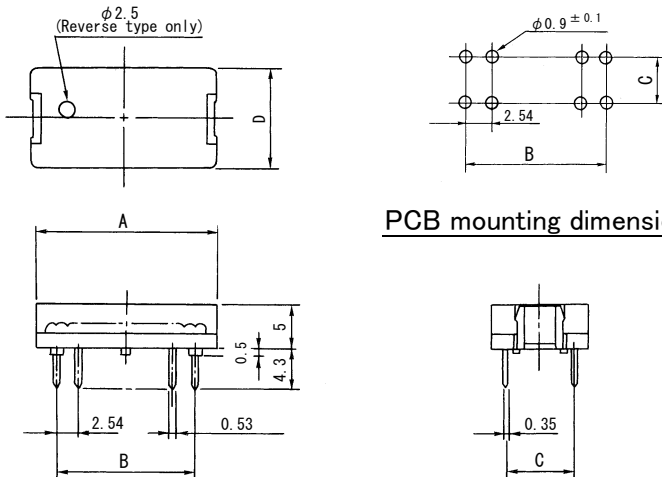
**CONTACT PLATING**  
3 : Gold flash over Nickel  
5 : Pb/Sn plating

**STRAIN RELIEF**  
No designation : No strain relief  
S : With strain relief

Strain relief for 65 contacts is not available.

**CONTACT ROW PITCH**  
O : 14, 16, 20 ..... 7.62mm  
24, 40 ..... 15.24mm  
64 ..... 22.86mm  
A : 20 ..... 10.16mm

E  
FRC-D,E,J



PCB mounting dimensions

NO. OF CONTACTS	P/N	A	B	C	D
14	FRC-D14□-□O	20.00	15.24	7.62	10.88
16	FRC-D16□-□O	22.54	17.78	7.62	10.88
20	FRC-D20-□O	27.62	22.86	7.62	10.88
20	FRC-D20-□A	27.62	22.86	10.16	13.42
24	FRC-D24□-□O	32.66	27.94	15.24	18.50
40	FRC-D40□-□O	52.98	48.26	15.24	18.50
64	FRC-D64-□O	83.46	78.74	22.86	26.12

## ■ Strain Relief

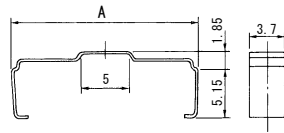
Material·····Stainless steel

### FRC-D **14-04**

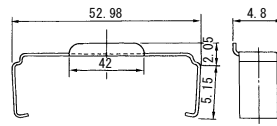
NO. OF CONTACTS  
14, 16, 20, 24, 40, 60

E

FRC-D,E,J

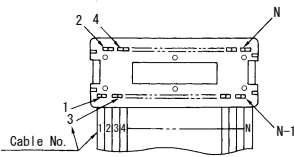


for 14, 16, 20, 24 contacts

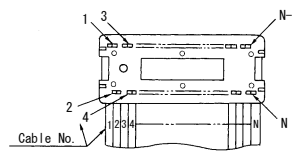


for 40 contacts

## Cable No. vs Contact Position (Tail Side)



Standard type



Reverse type

## Cable Assembly Tools

Cable cutting tool P/N : 357J-4256

Termination tool···Press P/N : 357J-4674D, Attachment P/N : 357J-4665 (14 to 40 contacts)

P/N : 357J-13023 (64 contacts only)

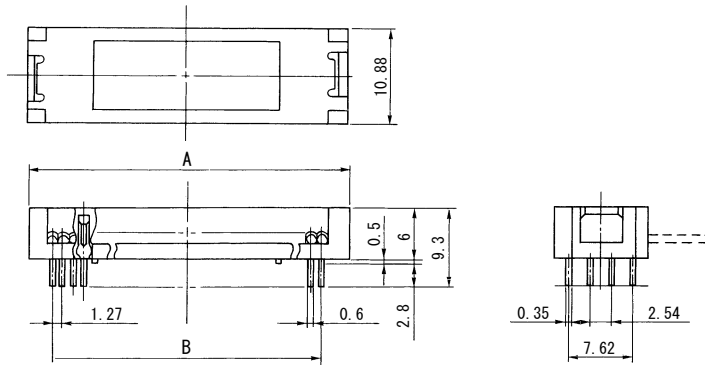
# FRC-E Series

Unit : mm

## FRC-E20-3

**NO. OF CONTACTS**  
20, 26, 30, 34, 40, 50, 60

**CONTACT PLATING**  
3 : Gold flash over Nickel  
5 : Pb/Sn plating

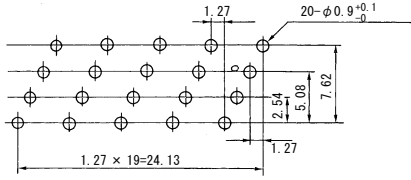


E  
FRC-D,E,J

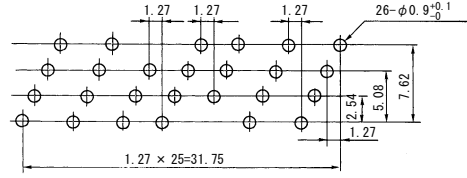
NO. OF CONTACTS	P/N	A	B
20	FRC-E20-□	30.18	24.13
26	FRC-E34-□	37.80	31.75
30	FRC-E30-□	42.88	36.83
34	FRC-E34-□	47.96	41.91
40	FRC-E40-□	55.38	49.53
50	FRC-E50-□	68.28	62.23
60	FRC-E60-□	80.98	74.93

## PCB Mounting Dimensions (Typical)

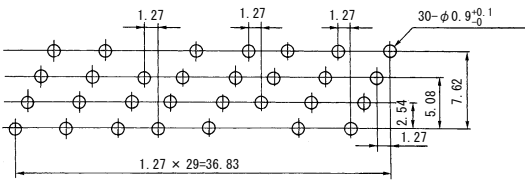
As viewed from soldering side



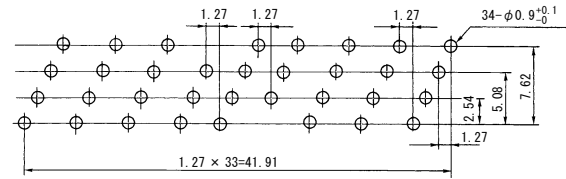
**FRC-E20-□**



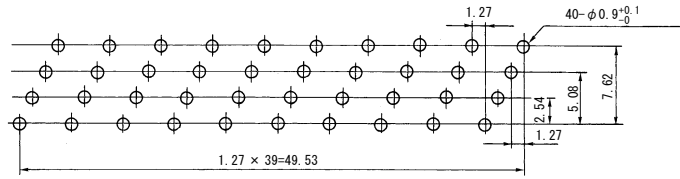
**FRC-E26-□**



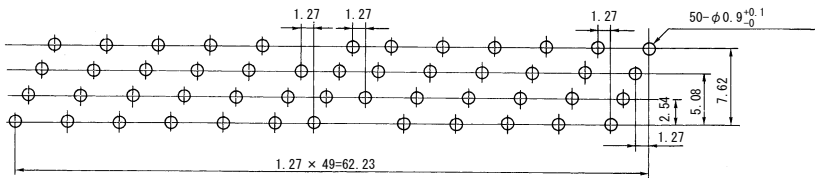
**FRC-E30-□**



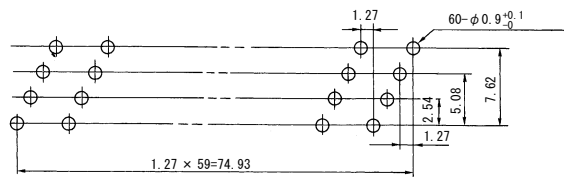
**FRC-E34-□**



**FRC-E40-□**

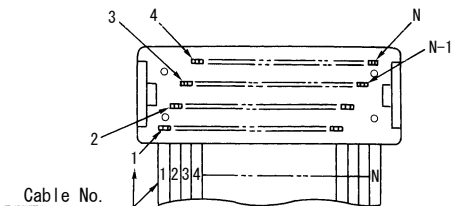


**FRC-E50-□**



**FRC-E60-□**

• Cable No. vs contact position (tail side)



• Cable assembly tools

Cable cutting tool P/N : 357J-4256

Termination tool···Press P/N : 357J-4674D

·· Attachment P/N : 357J-4666N

# FRC-J Series

Unit : mm

## FRC-J16A-3SN

**NO.OF CONTACTS**

10, 16, 20, 26, 30, 34, 40, 50, 60

**COVER STYLE**

A : Closed end

**STRAIN RELIEF**

N : No strain relief

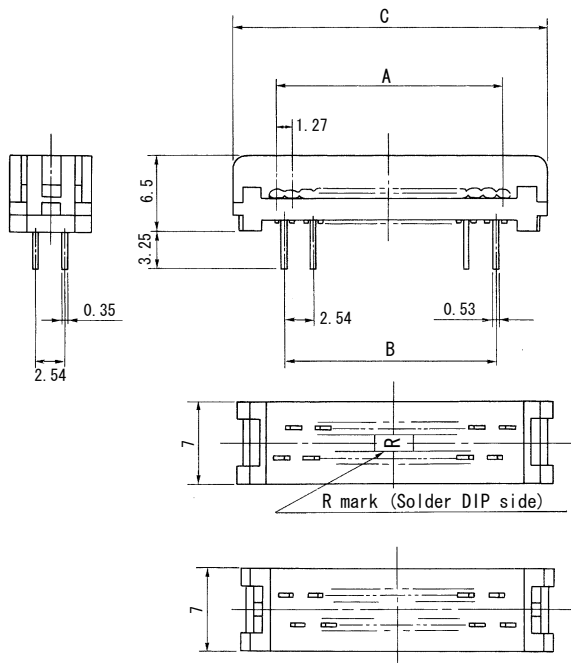
**CONTACT ARRANGEMENT**

S : Standard  
R : Reverse

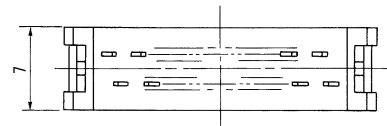
**CONTACT PLATING**

3 : Gold flash over Nickel  
5 : Pb/Sn plating

E  
FRC-D,E,J

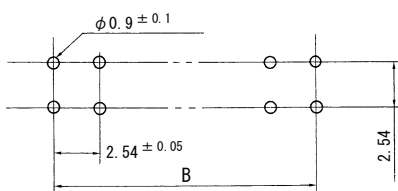


Reverse type



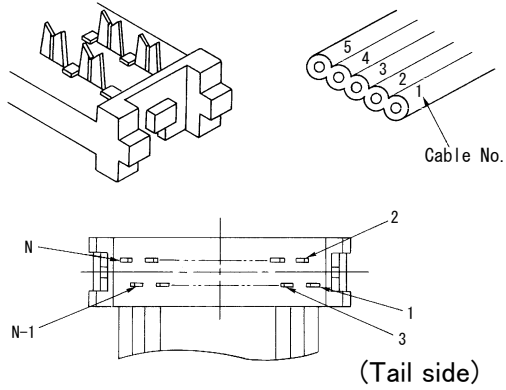
NO. OF CONTACTS	A	B	C
10	11.43	10.16	19.10
16	19.05	17.78	26.72
20	24.13	22.86	31.80
26	31.75	30.48	39.42
30	36.83	35.56	44.50
34	41.91	40.64	49.58
40	49.53	48.26	57.20
50	62.23	60.96	69.90
60	74.93	73.66	82.60

## PCB Mounting Dimensions

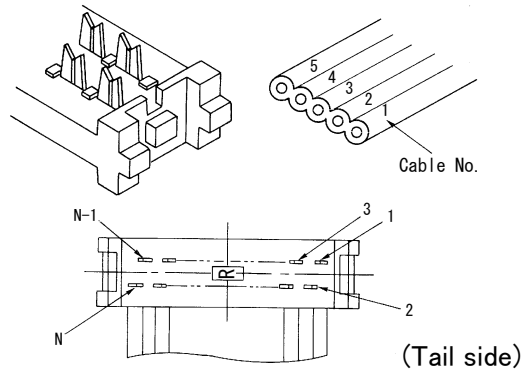


## Cable No. vs. Contact Position

Standard type



Reverse type



E

FRC-D,E,J

## Cable Assembly Tools

Cable cutting tool P/N : 357J-4256

Termination tool···Press P/N : 357J-4674D

Attachment and center locator

Attachment P/N	Center locatorP/N		Applicable contacts
	For standard type	For reverse type	
357J-5046	357J-5046-5-1	357J-5046-12-1	10
	357J-5046-5-3	357J-5046-12-3	16
	357J-5046-5-4	357J-5046-12-4	20
	357J-5046-5-6	357J-5046-12-6	26
	357J-5046-5-7	357J-5046-12-7	30
	357J-5046-5-8	357J-5046-12-8	34
	357J-5046-5-9	357J-5046-12-9	40
	357J-5046-5-10	357J-5046-12-10	50
	357J-5046-5-11	357J-5046-12-11	60



# DIMM Socket for Memory Expansion

In Accordance with JEDEC Standard DMM Series, 100 Contacts



- Laser Printers, Fax machines, Terminals, Peripherals

## FEATURE

- Applicable to 100-position DIMM module board in accordance with JEDEC standard
- Voltage keying design for 5V modules
- Insulator molded from surface mount compatible polyamide material
- Locking ejectors hold module in place during vibration

F  
DMM(100)

## SPECIFICATION

Voltage rating	250 V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 500V DC
Contact resistance	40m $\Omega$ max.

## MATERIAL/FINISH

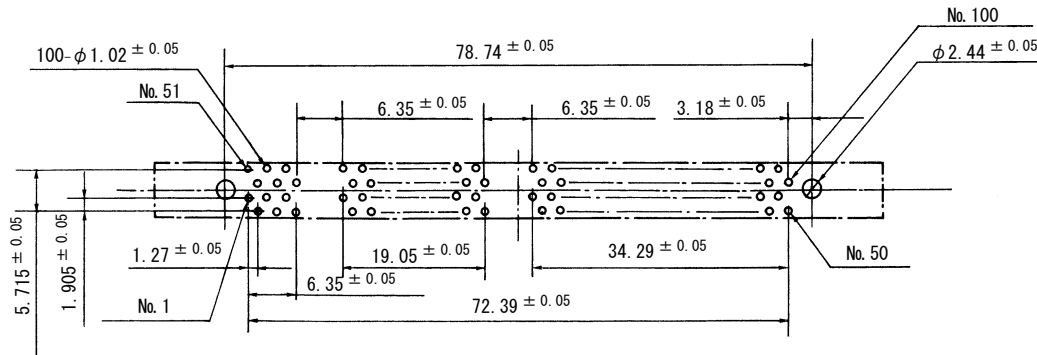
Contact/Finish	Copper alloy/0.38 $\mu$ m Gold over Nickel (mating), Tin-Lead (tail)
Insulator	Polyamide resin (UL94V-O)/Black
Ejector	Polyamide resin (UL94V-O)/Black



# DMM Series (100 Contacts)

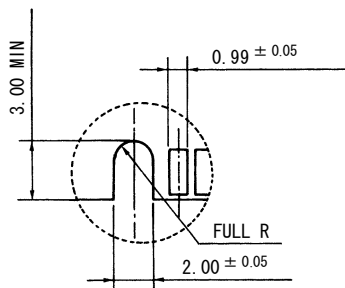
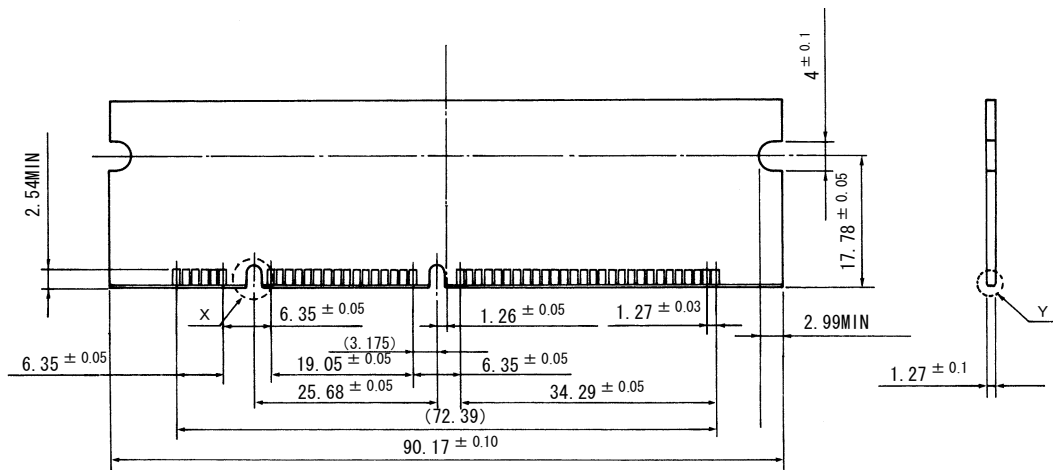
Unit : mm

## PCB Mounting Dimensions (Connector Mount Side)

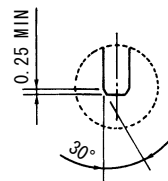


## Module Dimensions

F  
DMM(100)



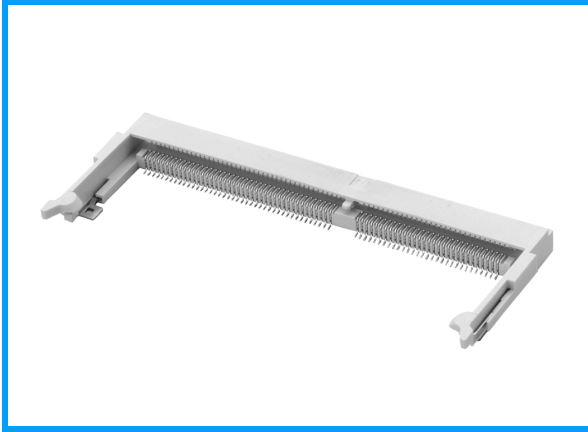
Detail "X"



Detail "Y"

# SO-DIMM Socket for Memory Expansion

Comforming to JEDEC Standard DMM3 Series, 144 Contacts, 0.8mm Pitch



• Notebook computers, palmtop computers and handheld devices

## FEATURE

- Applicable to 144-position SO-DIMM module board per JEDEC standard
- Easy mating and unmating with unique locking and ejecting system
- Surface mount design
- Voltage keying design for 3.3V modules

G

DMM3(144)

## SPECIFICATION

Voltage rating	100V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	250V AC (rms) for 1 minute
Insulation resistance	250M $\Omega$ min. at 250V DC
Contact resistance	40m $\Omega$ max.

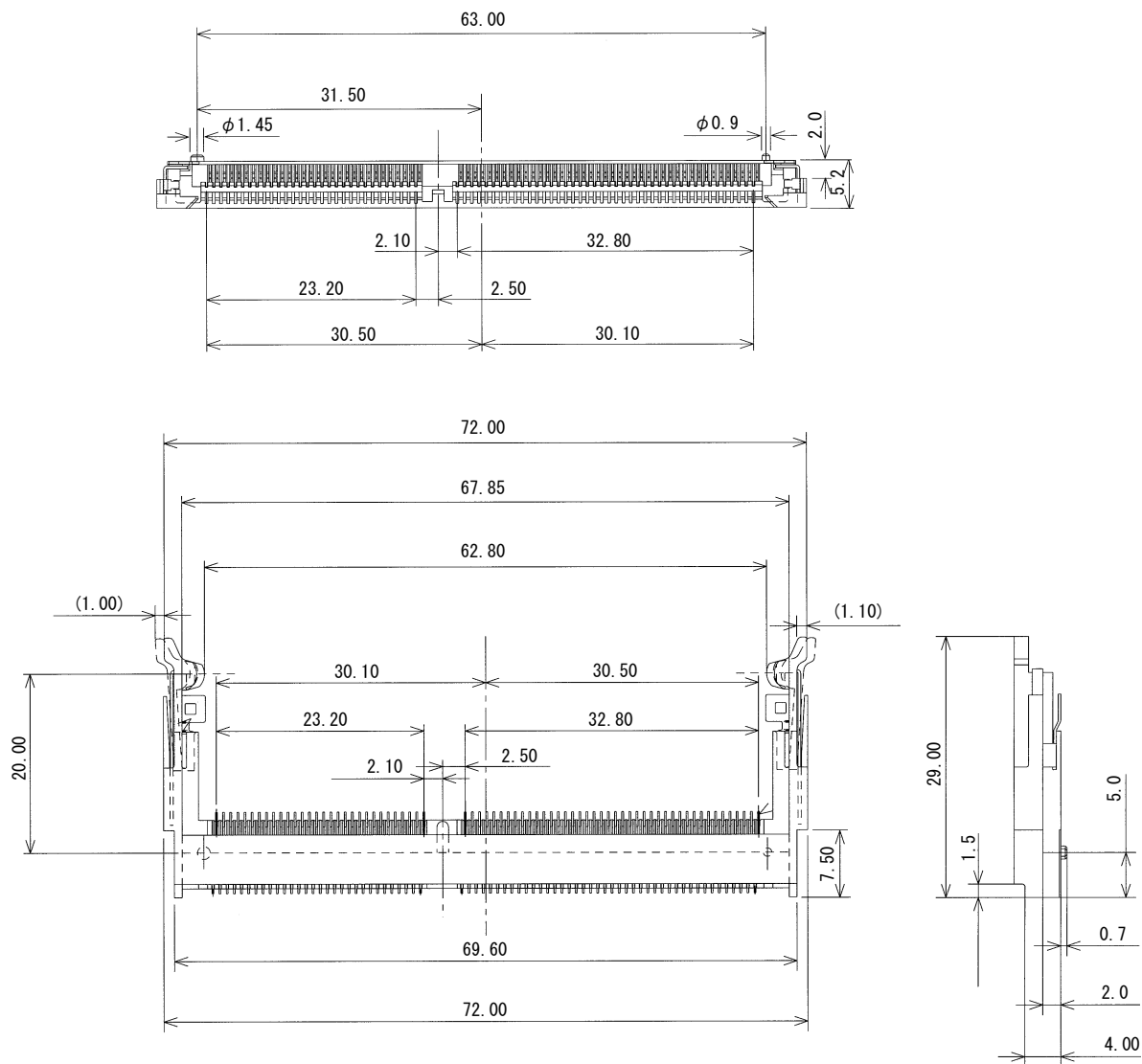
## MATERIAL/FINISH

Contact/Finish	Copper alloy/Gold over Nickel plating (mating), Tin-Lead (tail)
Insulator	LCP resin (UL94V-O)/Ivory
Locking Tab	Copper alloy/Solder plating

# DMM3 Series (144 Contacts)

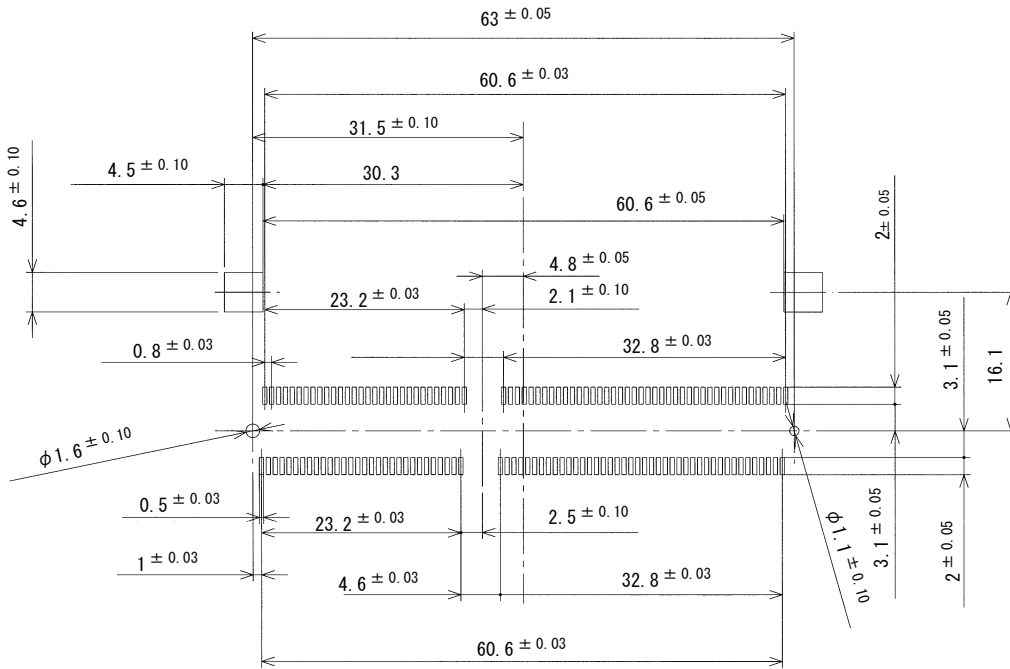
Unit : mm

## DMM3-RS144A2B-13



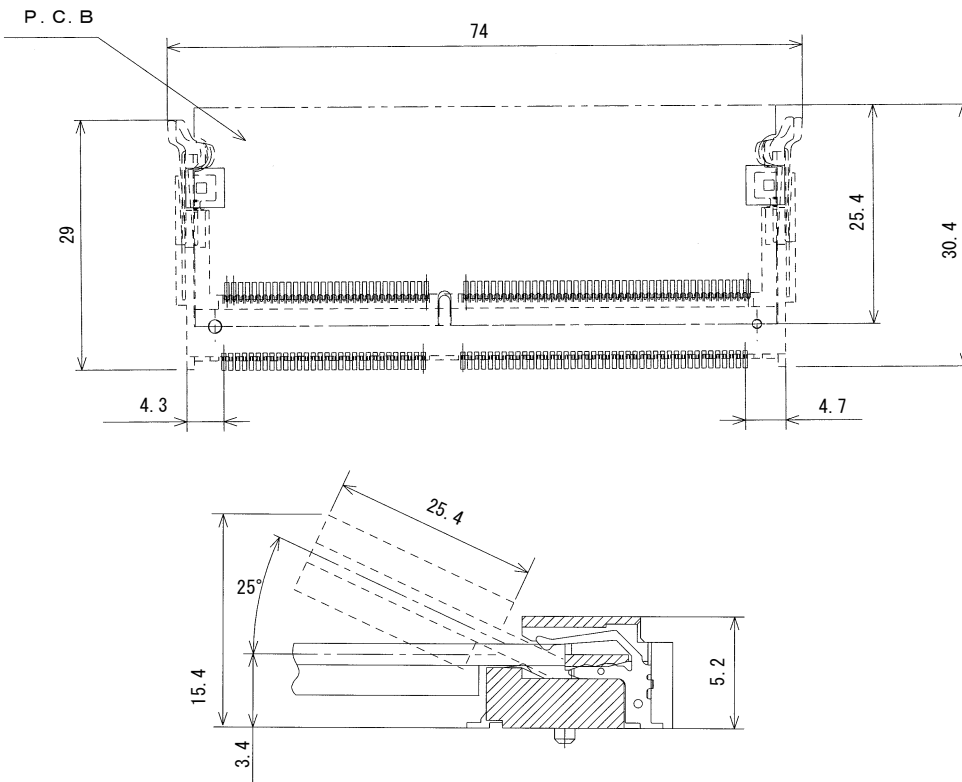
G  
DMM3(144)

## PCB Mounting Dimensions



G  
DMM3(144)

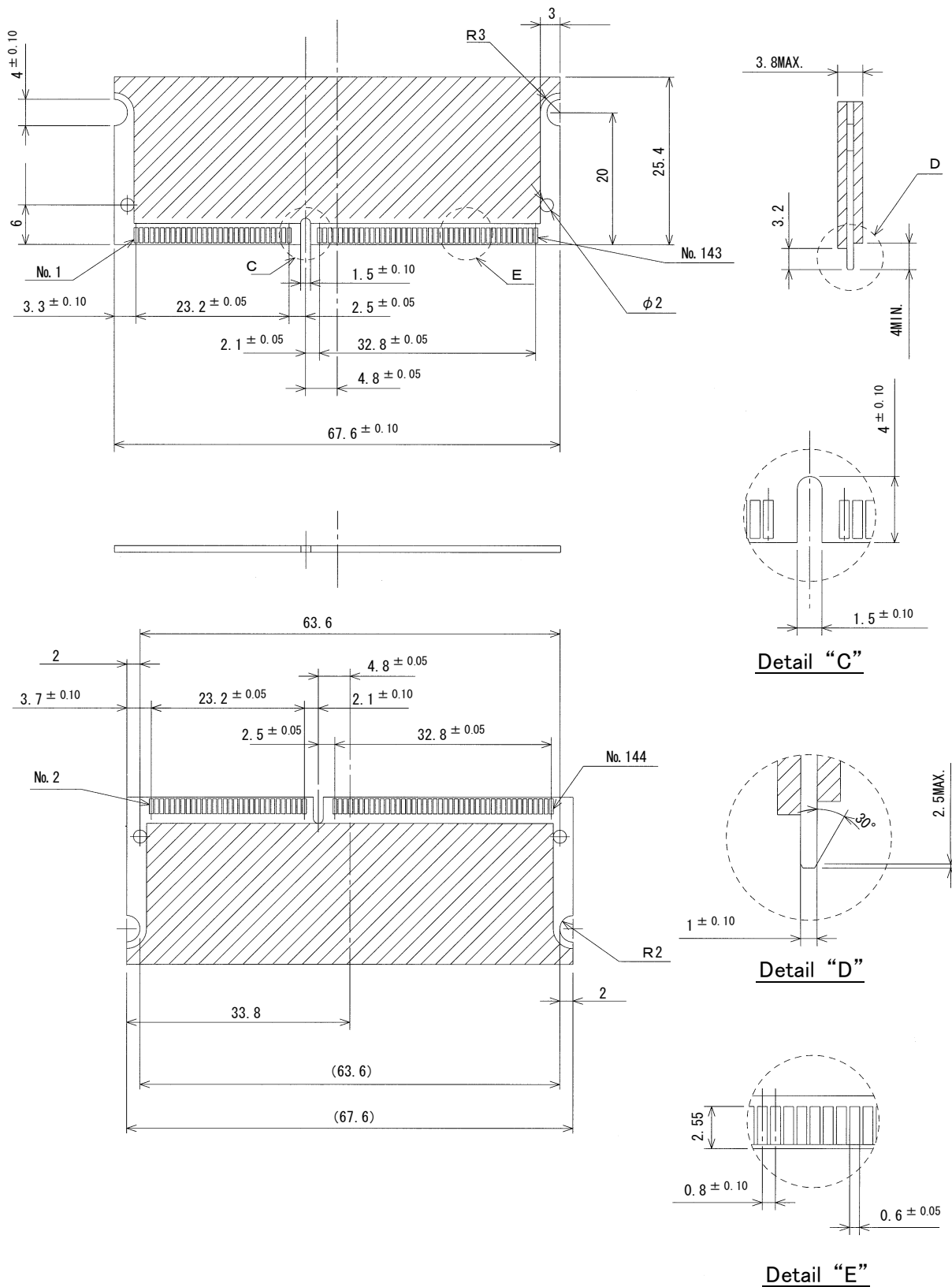
## PCB Connector Mounting Space (Reference)



# DMM3 Series (144 Contacts)

Unit : mm

## Module Dimensions

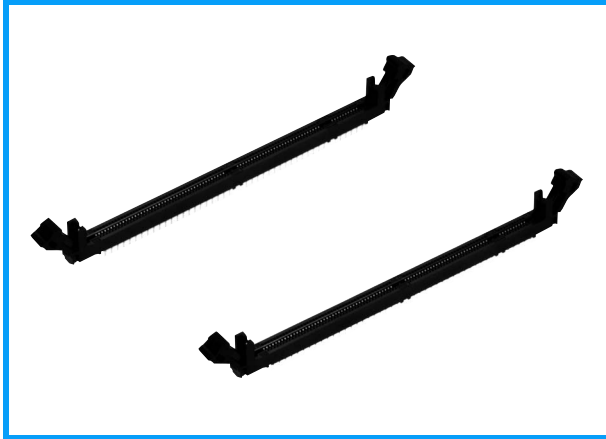


G  
DMM3(144)

# DIMM Socket For Memory Expansion

## Conforming To JEDEC Standard DMM Series, 168 Contacts

Workstations, Computers, Disk arrays and Servers



### FEATURE

- Applicable to 168-position module per JEDEC standard MO-161
- Board locks which prevent the connector from lifting during reflow soldering
- Voltage keying design for both 5V and 3.3V modules
- Available with locking ejector on either side or both sides of connector
- Insulator molded from surface mount compatible plastic
- Accepts DRAM, SDRAM and non-standard DRAM module
- Straight plug in design minimizes bending of module
- Low insertion force

### SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 500V DC
Contact resistance	40m $\Omega$ max.

H

DMM(168)

### MATERIAL/FINISH

Contact/Finish	Copper alloy/Gold over Nickel plating (mating), Tin-lead plating (tail)
Insulator	Polyamide resin (UL94V-O)/Black
Ejector	Stainless steel
Board lock	Copper alloy/Solder plating
Lock	Polyamide resin (UL94V-O)/Black

DRAM Type	Voltage	P/N
Sync. DRAM	3.3V	DMM-168FLDA1-3A113
		DMM-168FLDA1-3A133
		DMM-168FLDA2-3A113
		DMM-168FLDA2-3A133
		DMM-168FLDA2-3A134
		DMM-168FLDA2-3A13N
		DMM-168FLDA2-3A135
		DMM-168FLDA2-3B133
		DMM-168FLDA2-3B137
		DMM-168FLDA2-3B13N
	5.0V	DMM-168FLDA1-2A213
		DMM-168FLDA2-2A213
		DMM-168FLDA3-2A213
		DMM-168FLDA4-2A213
		DMM-168FLHB1-3A114
		DMM-168FLHB1-3A134
		DMM-168FLHB2-3A114
		DMM-168FLHB2-3A133
		DMM-168FLHB2-3A134
		DMM-168FLHB2-3A13N
Standard DRAM	3.3V	DMM-168FLEA1-3A113
		DMM-168FLEA1-3A133
		DMM-168FLEA1-3A13N
		DMM-168FLEA1-3A163
		DMM-168FLEA2-3A113
		DMM-168FLEA2-3A117
		DMM-168FLEA2-3A133
		DMM-168FLEA2-3A134
		DMM-168FLEA2-3A137
		DMM-168FLEA2-3A163
	5.0V	DMM-168FLEA3-3A117
		DMM-168FLEA3-3A137
		DMM-168FLFB1-3A116
		DMM-168FLFB1-3A136
		DMM-168FLFB2-2B214
		DMM-168FLFB2-3A111
		DMM-168FLFB2-3A116
		DMM-168FLFB2-3A132
		DMM-168FLFB2-3A133
		DMM-168FLFB2-3A136
Non-Standard DRAM	3.3V	DMM-168FLAA1-1A233
		DMM-168FLAA1-3A113
		DMM-168FLAA1-3A133
		DMM-168FLAA2-2A213
		DMM-168FLAA2-2A233
		DMM-168FLAA2-2A236
		DMM-168FLAA2-2B212
		DMM-168FLAA2-2B232
		DMM-168FLAA2-2B233
		DMM-168FLAA2-2B262
		DMM-168FLAA2-2B263
		DMM-168FLAA2-3A113
		DMM-168FLAA2-3A116
		DMM-168FLAA2-3A133
		DMM-168FLAA2-3A136
		DMM-168FLAA2-3A166
		DMM-168FLAA2-3A13N
		DMM-168FLAA2-3B112
		DMM-168FLAA2-3B133
		DMM-168FLAA2-3B13N
	DMM-168FLAA2-3B162	
	DMM-168FLAA2-3A137	
	DMM-168FLAA2-3A163	
	DMM-168FLAA2-3A134	
	DMM-168FLAA3-1A233	
	DMM-168FLAA3-1A234	
	DMM-168FLAA3-3A113	
	DMM-168FLAA3-3A133	
	DMM-168FLAA3-3A136	
	DMM-168FLAA3-3A13N	
	DMM-168FLAA3-1B212	
	DMM-168FLAA4-3A113	
	DMM-168FLAA4-3A133	
	5.0V	DMM-168FLGB1-3A112
		DMM-168FLGB1-3A132
		DMM-168FLGB2-3A112
		DMM-168FLGB2-3A132



# DMM Series (168 Contacts)

Unit : mm

■ Sync. DRAM Operation Voltage 3.3V

## DMM-168FLDA2-3A23N

### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory
- 4 : Ivory/Ivory

### Tail Pitch

- 2 : 1.27mm
- 3 : 1.905mm

### Tail Pitch Arrangement

- A : See page 3
- B : See page 3

### Board lock and hole size

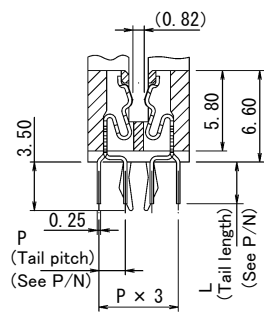
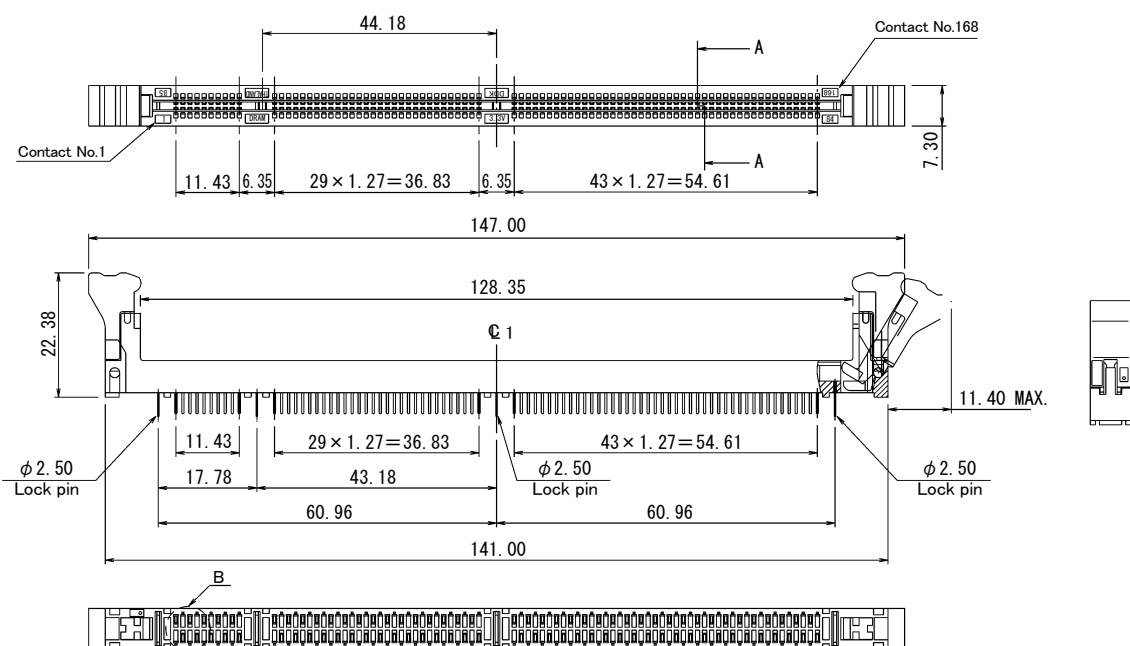
- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 5 : with 1 Board locks,  $\phi$  2.03 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

### Contact plating

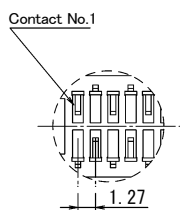
- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead

### Tail Length

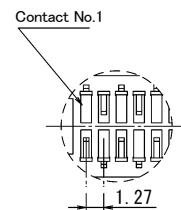
- 1 : 3.0mm
- 2 : 3.2mm



SEC.A-A



DETAIL B-1  
DMM-168FL □□□ - □ A □□□



DETAIL B-2  
DMM-168FL □□□ - □ B □□□

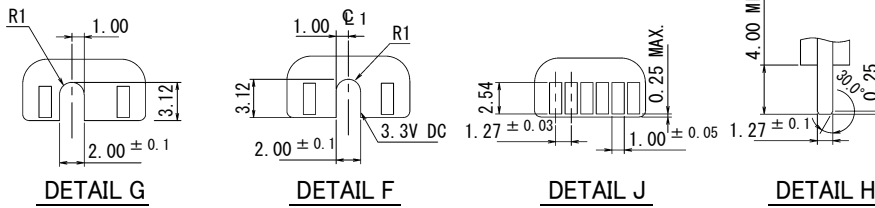
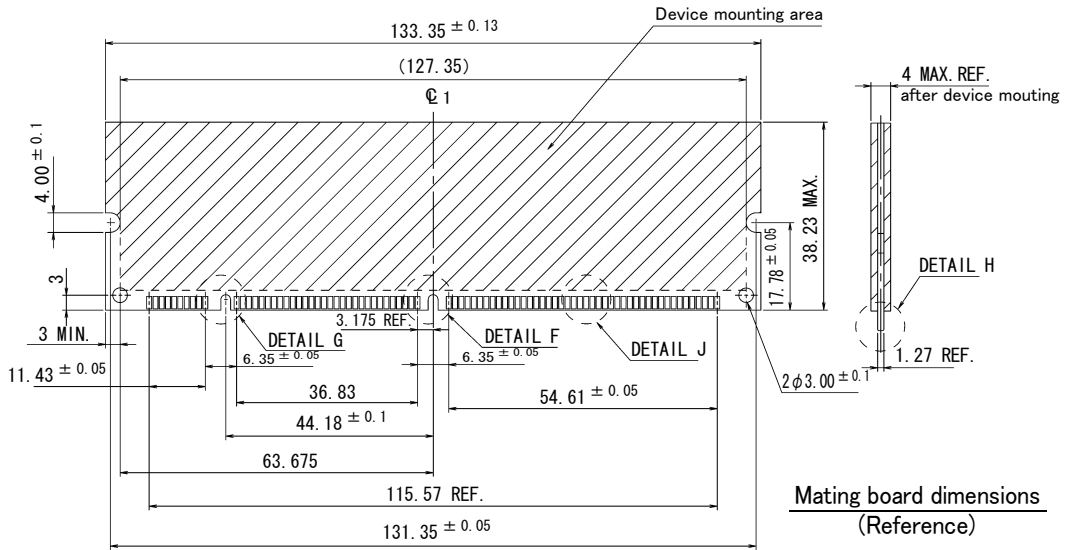
H  
DMM(168)

# DMM Series (168 Contacts)

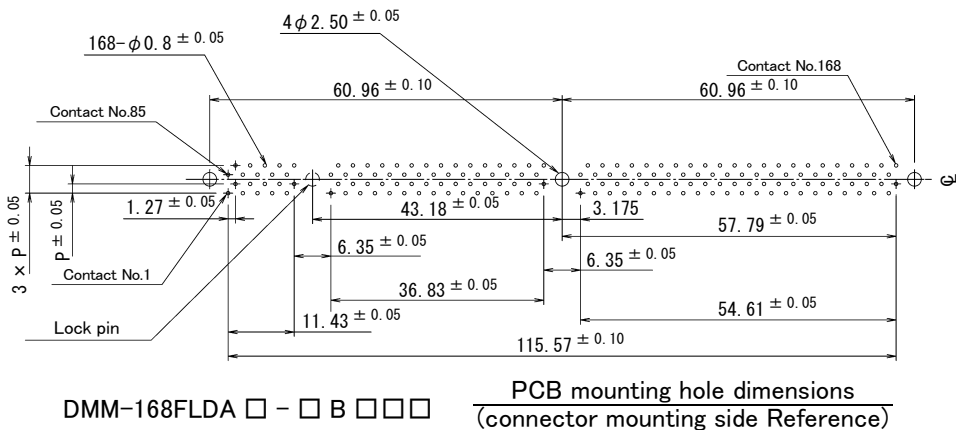
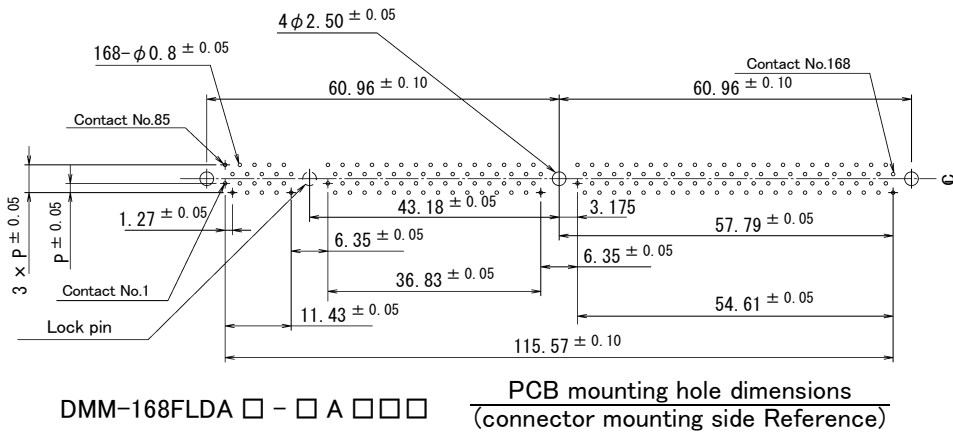
Unit : mm

## Sync. DRAM Operation Voltage 3.3V

### Mating board dimensions



### PCB mounting hole dimensions



H  
DMM(168)

# DMM Series (168 Contacts)

Unit : mm

■ Sync. DRAM Operation Voltage 5.0V

## DMM-168FLHB<sup>2</sup>-3A<sup>1</sup>3<sup>4</sup>

### Housing/Lock color

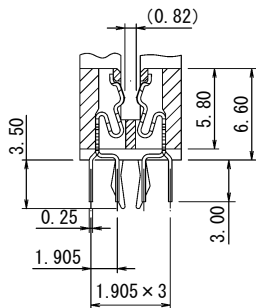
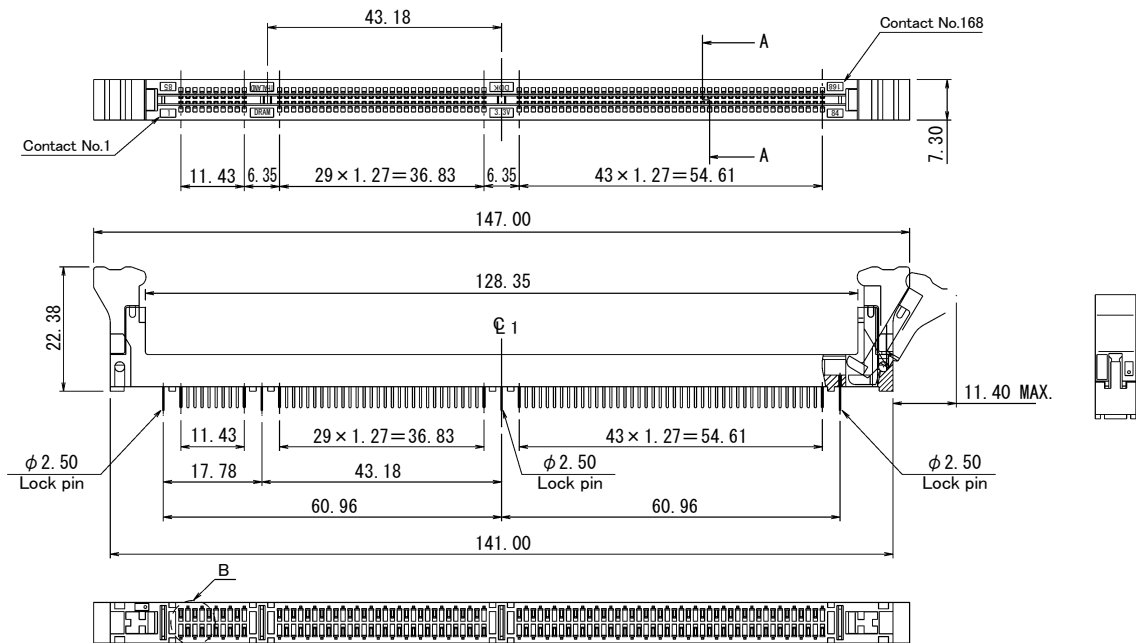
- 1 : Ivory/Ivory
- 2 : Black/Black

### Board lock and hole size

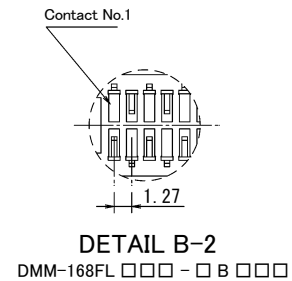
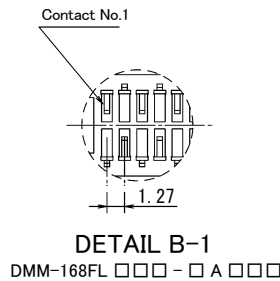
- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes

### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead



SEC.A-A



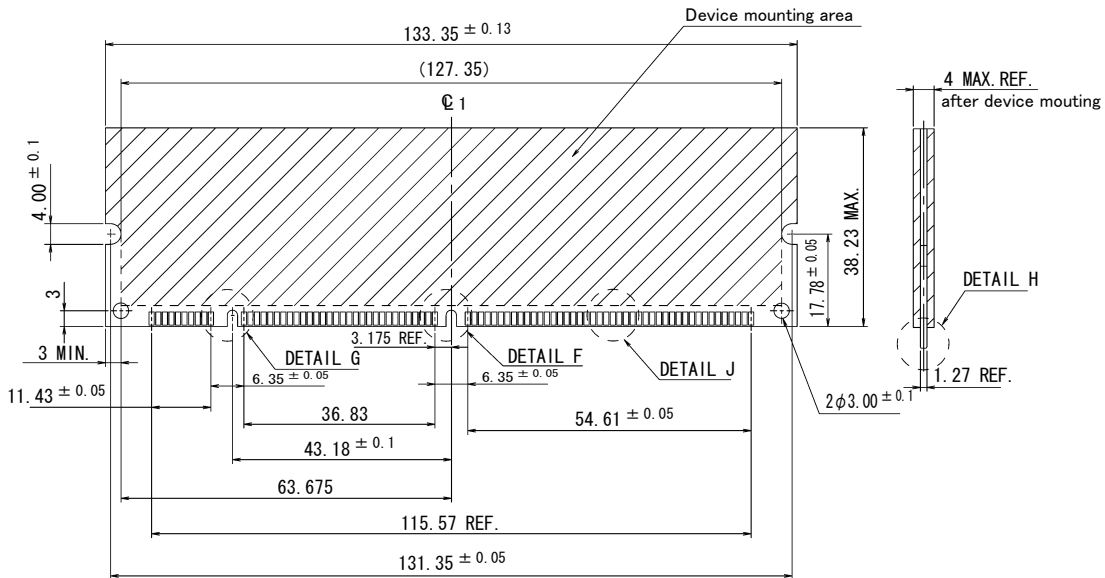
H  
DMM(168)

# DMM Series (168 Contacts)

Unit : mm

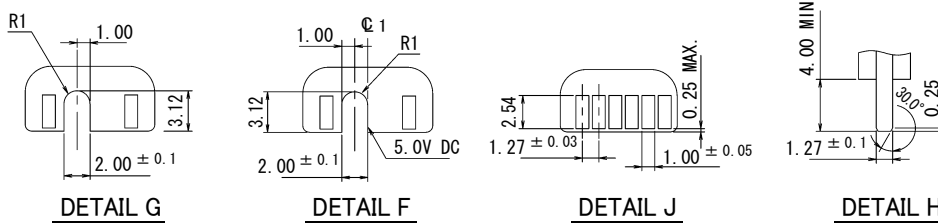
## Sync. DRAM Operation Voltage 5.0V

### Recommended mating board dimensions

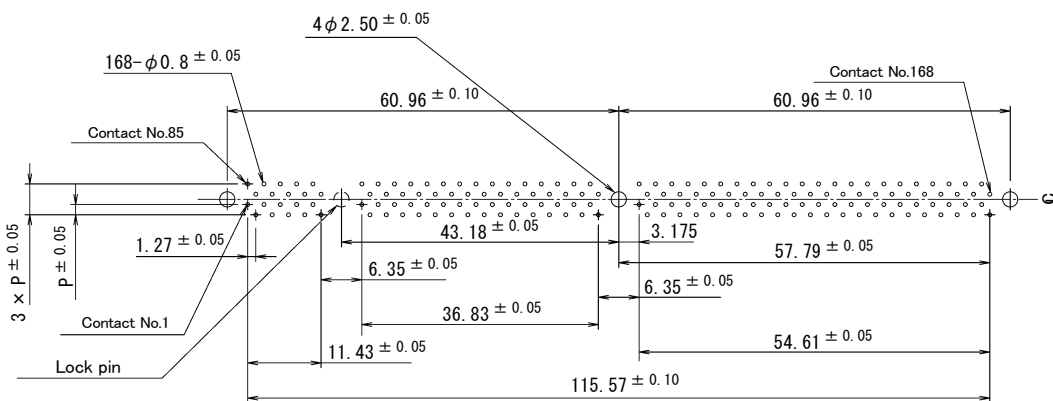


Recommended mating board dimensions  
(Reference)

H  
DMM(168)



### Recommended PCB mounting hole dimensions



DMM-168FLHB □ - □ A □ □ □  
Recommended PCB mounting hole dimensions  
(connector mounting side Reference)

# DMM Series (168 Contacts)

Unit : mm

Standard DRAM Operation Voltage 3.3V

## DMM-168FLEA3-3A13N

### Housing/Lock color

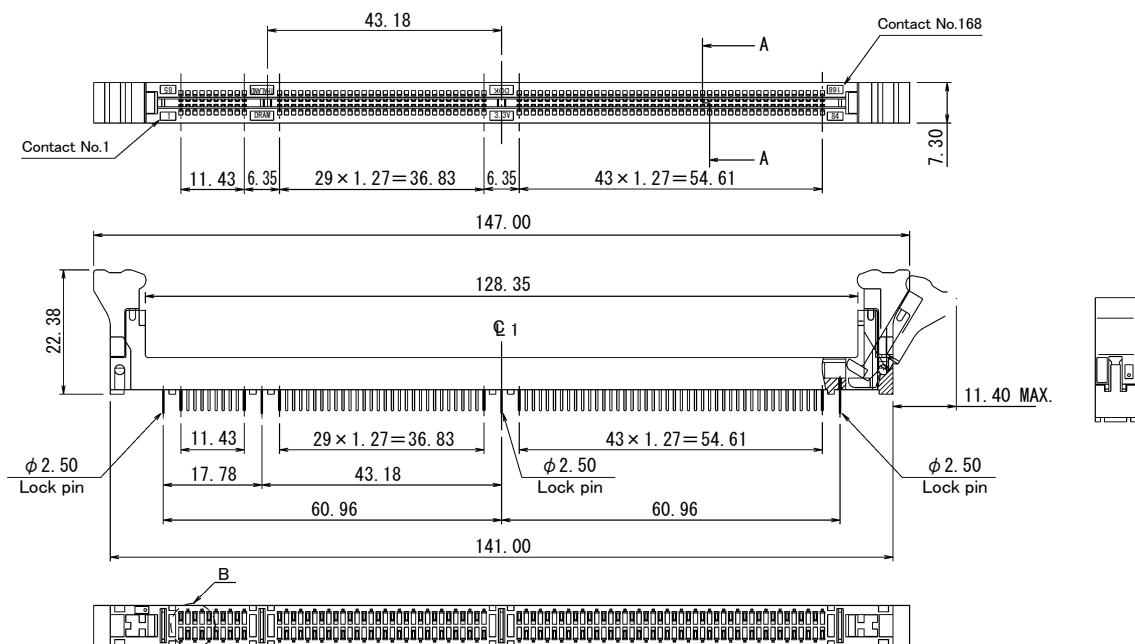
- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory

### Board lock and hole size

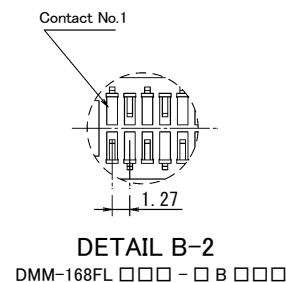
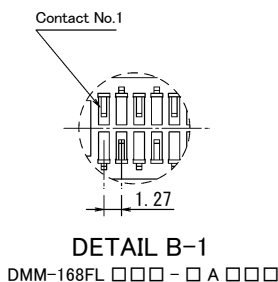
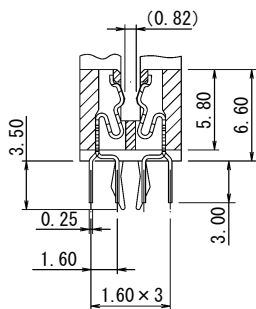
- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead
- 6 : Mating area...0.76  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead



H  
DMM(168)

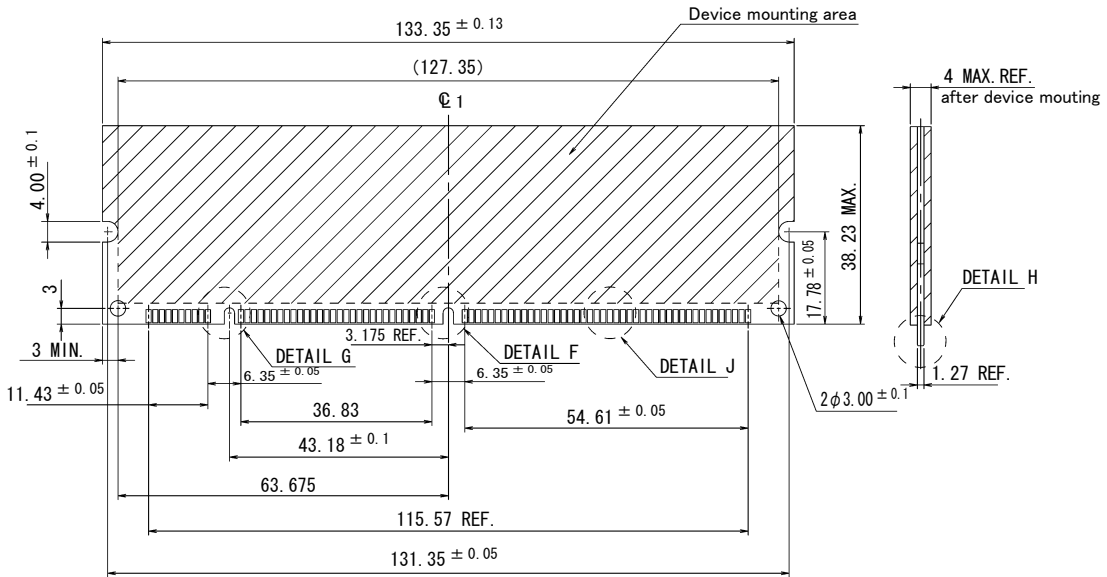


# DMM Series (168 Contacts)

Unit : mm

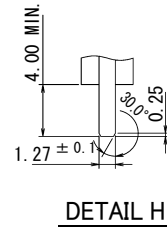
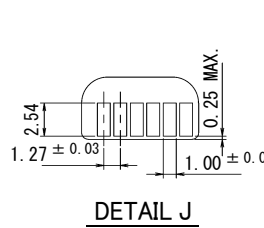
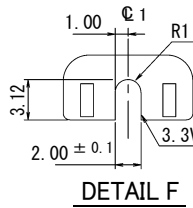
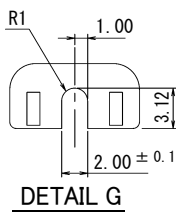
## Standard DRAM Operation Voltage 3.3V

### Recommended mating board dimensions

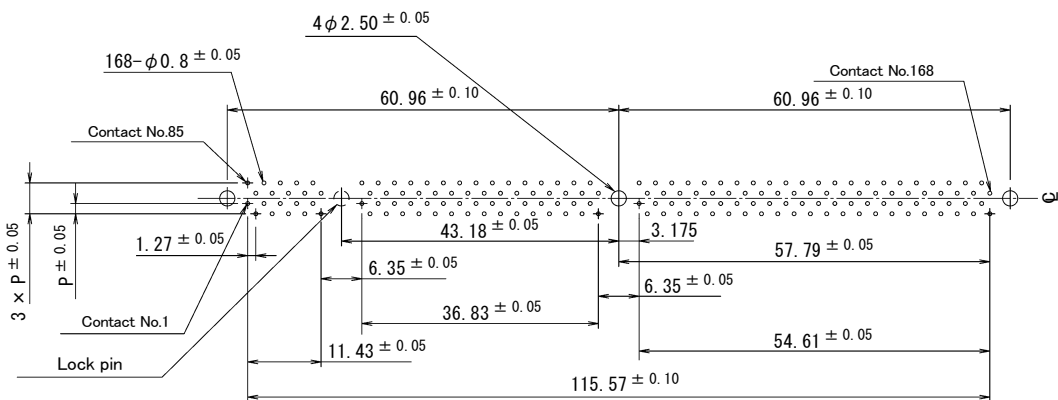


Recommended mating board dimensions  
(Reference)

H  
DMM(168)



### Recommended PCB mounting hole dimensions



DMM-168FLEA □ - □ A □ □ □  
Recommended PCB mounting hole dimensions  
(connector mounting side Reference)

# DMM Series (168 Contacts)

Unit : mm

Standard DRAM Operation Voltage 5.0V

## DMM-168FLFB2-3A136

### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black

### Tail Pitch

- 2 : 1.27mm
- 3 : 1.905mm

### Tail Pitch Arrangement

- A : See page 9
- B : See page 9

### Board lock and hole size

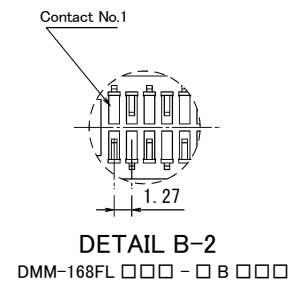
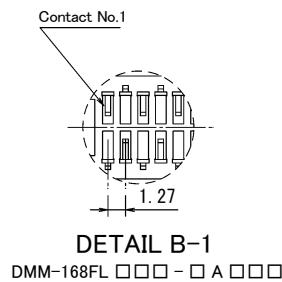
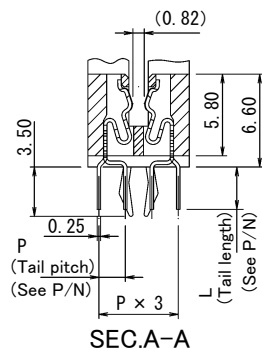
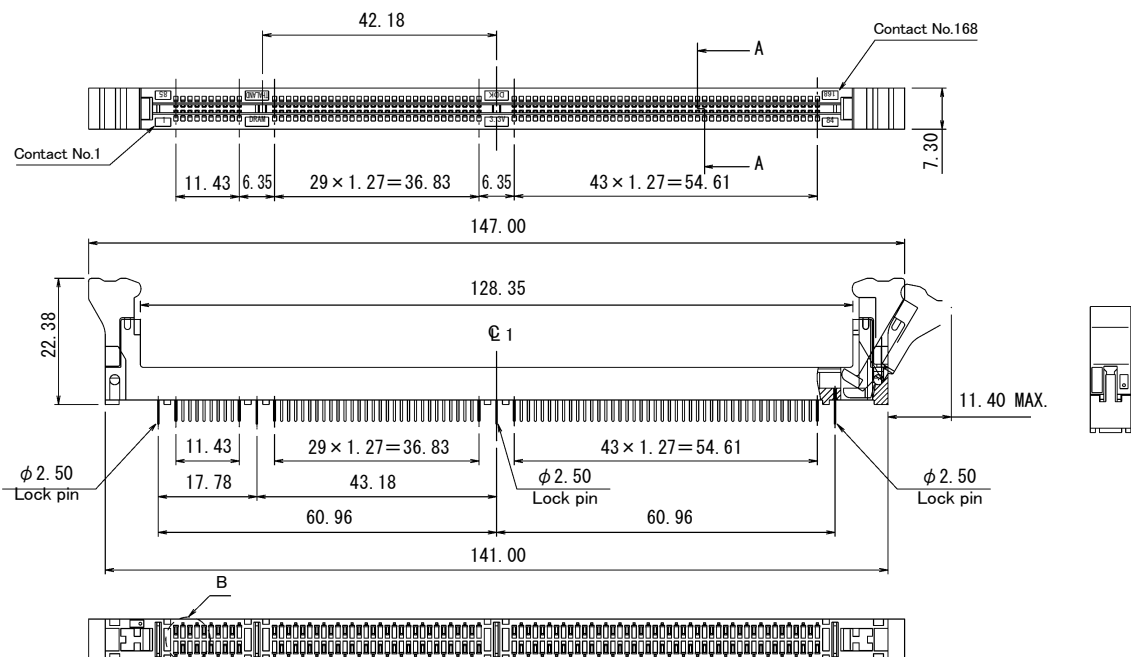
- 1 : with 1 Board locks,  $\phi$  2.50 holes
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 6 : with 2 Board locks,  $\phi$  2.03 holes

### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead

### Tail Length

- 1 : 3.0mm
- 2 : 3.2mm



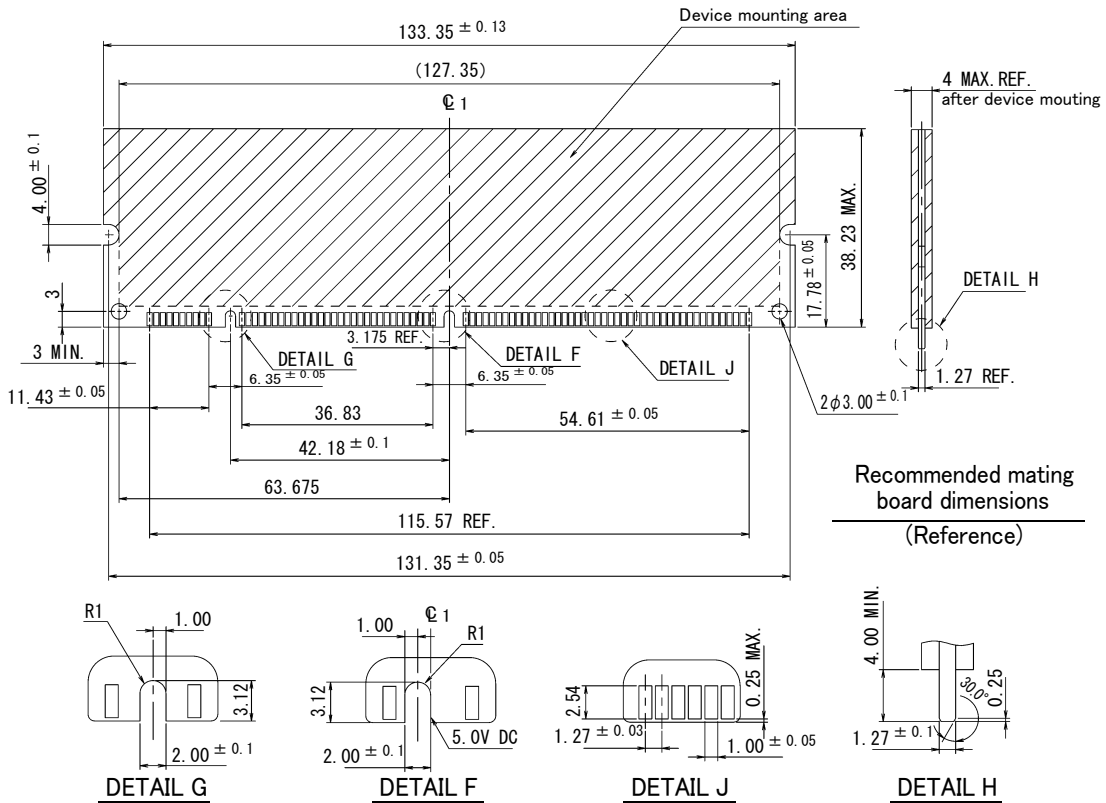
H  
DMM(168)

# DMM Series (168 Contacts)

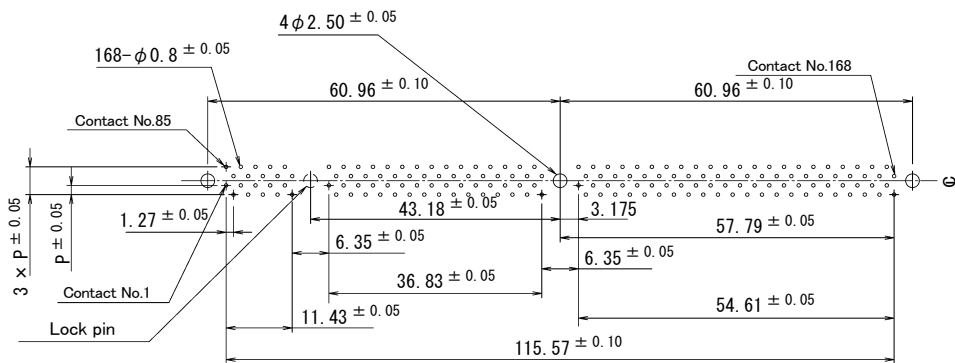
Unit : mm

## Standard DRAM Operation Voltage 5.0V

### Recommended mating board dimensions

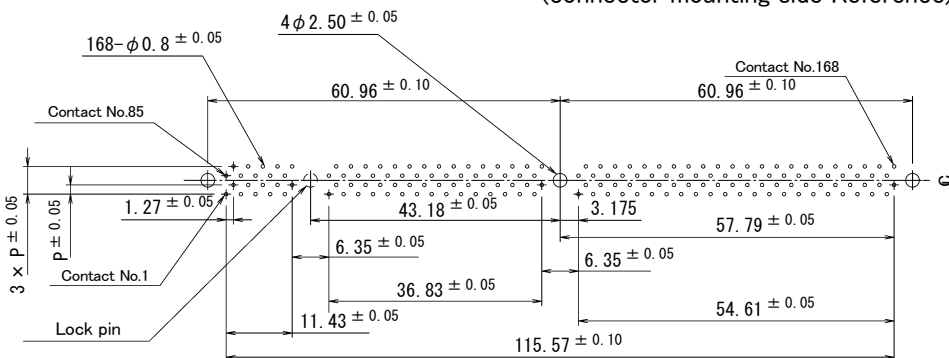


### Recommended PCB mounting hole dimensions



DMM-168FLFB □ - □ A □ □ □

**Recommended PCB mounting hole dimensions (connector mounting side Reference)**



DMM-168FLFB □ - □ B □ □ □

**Recommended PCB mounting hole dimensions (connector mounting side Reference)**



# DMM Series (168 Contacts)

Unit : mm

## ■ Non-Standard DRAM Operation Voltage 3.3V

### DMM-168FLAA2-3B216

#### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory
- 4 : Ivory/Ivory

#### Tail Pitch

- 1 : 1.60mm
- 2 : 1.27mm
- 3 : 1.905mm

#### Tail Pitch Arrangement

- A : See page 11
- B : See page 11

#### Board lock and hole size

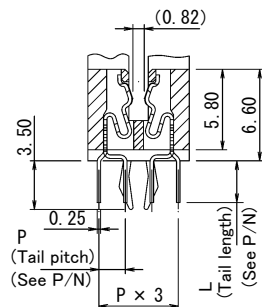
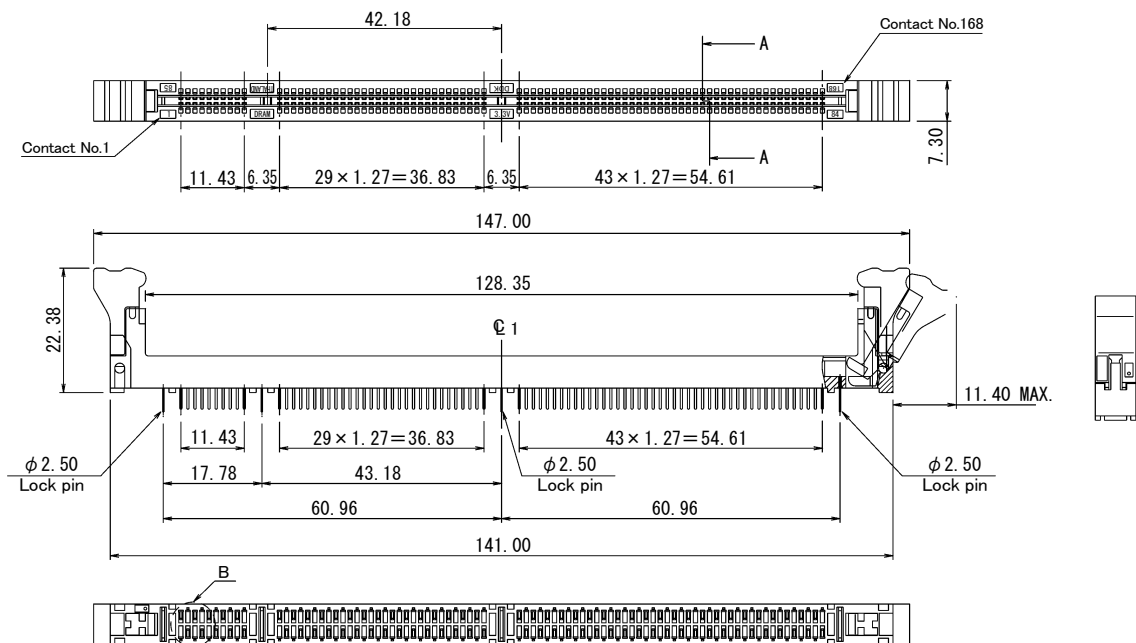
- N : without Board lock
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 6 : with 2 Board locks,  $\phi$  2.03 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

#### Contact plating

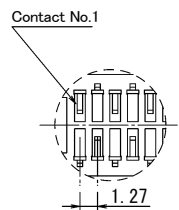
- 1 : Mating area...0.3  $\mu$ m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead
- 6 : Mating area...0.76  $\mu$ m Gold over Nickel  
Tail area...Tin-Lead

#### Tail Length

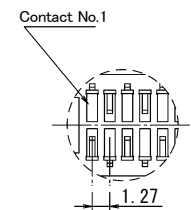
- 1 : 3.0mm
- 2 : 3.2mm



SEC.A-A



DETAIL B-1  
DMM-168FL □□□ - □ A □□□



DETAIL B-2  
DMM-168FL □□□ - □ B □□□

H  
DMM(168)



# DMM Series (168 Contacts)

Unit : mm

■ Non-Standard DRAM Operation Voltage 5.0V

## DMM-168FLGB 1-3A 132

**Housing/Lock color**

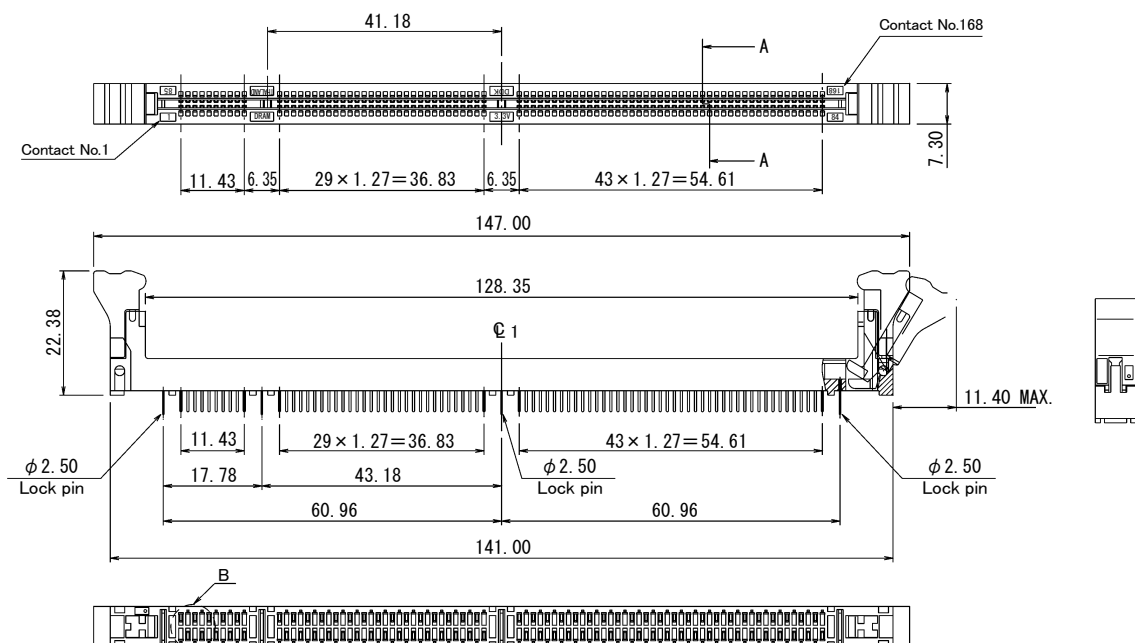
- 1 : Ivory/Ivory
- 2 : Black/Black

**Board lock and hole size**

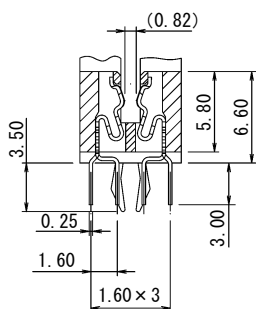
- N : without Board lock
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes

**Contact plating**

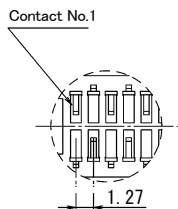
- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 2 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead



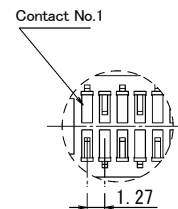
H  
DMM(168)



SEC.A-A



DETAIL B-1  
DMM-168FL □□□ - □ A □□□



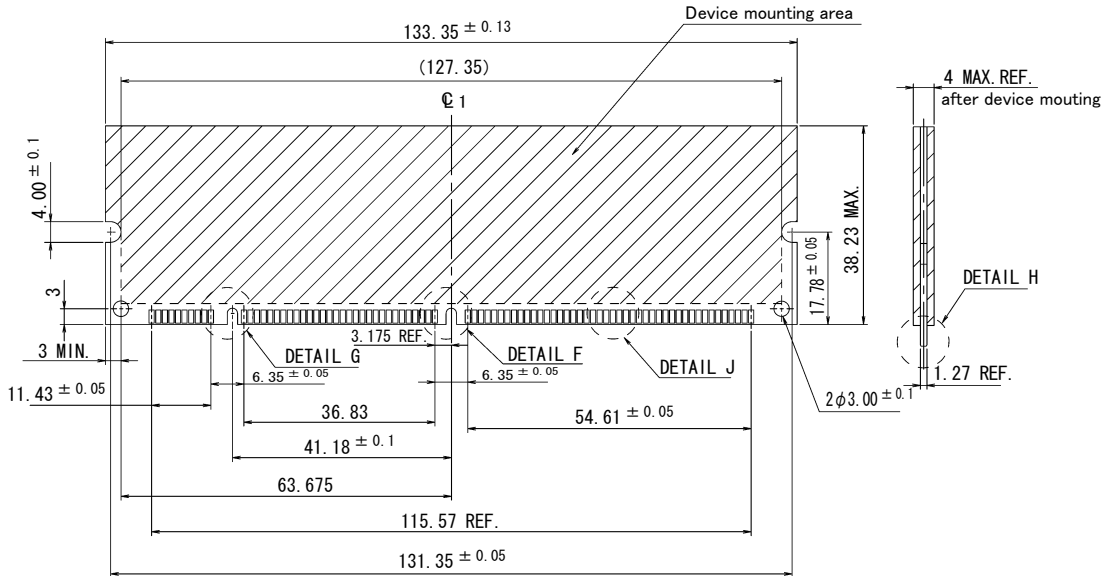
DETAIL B-2  
DMM-168FL □□□ - □ B □□□

# DMM Series (168 Contacts)

Unit : mm

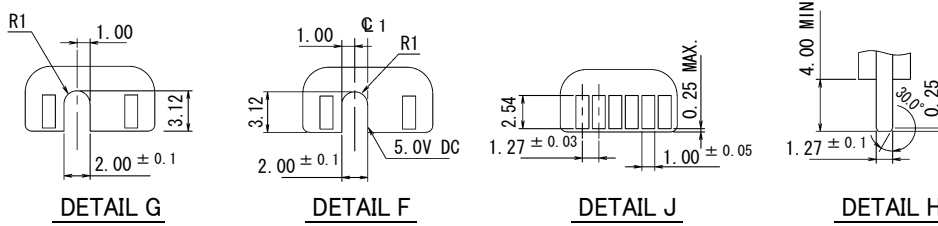
## ■ Non-Standard DRAM Operation Voltage 5.0V

### ■ Recommended mating board dimensions

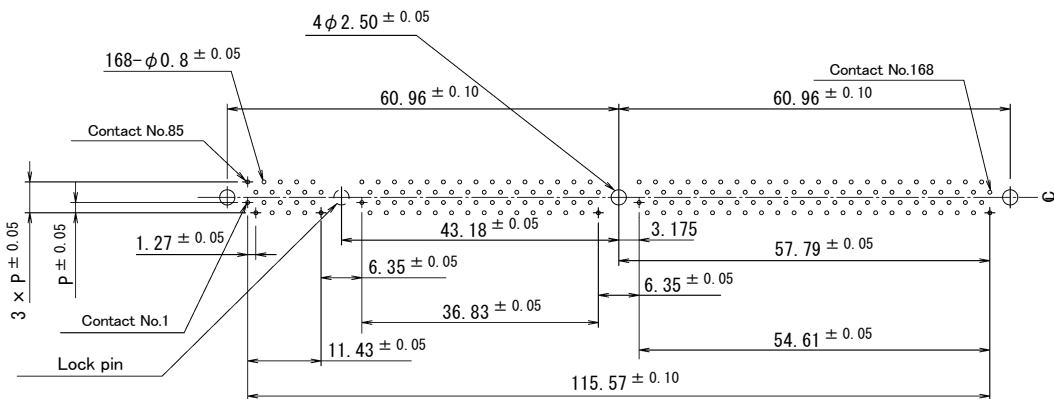


Recommended mating board dimensions  
(Reference)

H  
DMM(168)



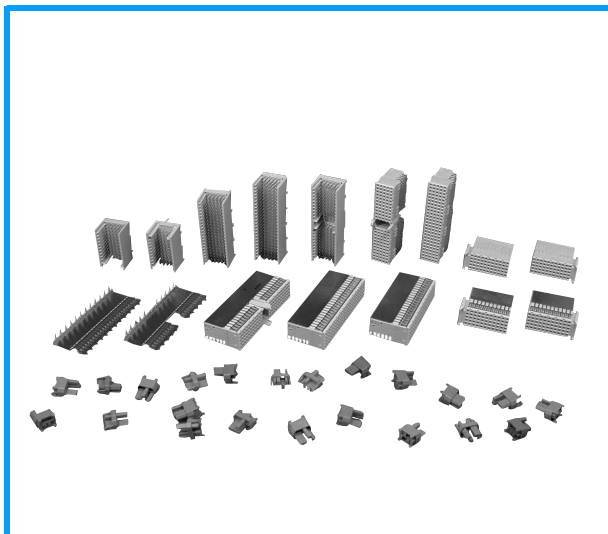
### ■ Recommended PCB mounting hole dimensions



DMM-168FLHB □ - □ A □ □ □  
Recommended PCB mounting hole dimensions  
(connector mounting side Reference)

# HTC Series

## For IEC 61076-4-101 2mm Grid Hard Metric Connectors



- Comforming to IEC 61076-4-101
- Pressfit contacts for PC board
- Reliable twin contact
- Available with grounding function

### CONFORMING STANDARD

IEC 61076-4-101

## APPLICATION

Exchanger, Trasmision Equipment, Base Station, Industrial Computer Board, Measurement Equipment, Controller

## SPECIFICATION

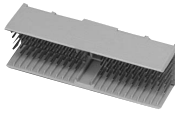
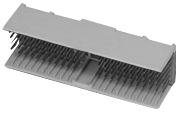
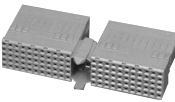
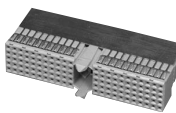
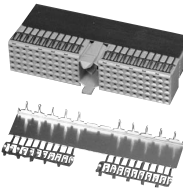
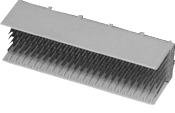
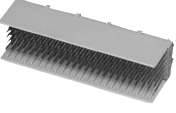
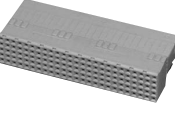

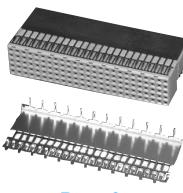




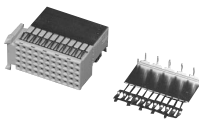




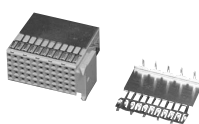

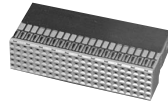




Voltage Rating	300V AC (rms)
Current Rating	1.0A/contact
Dielectric with standing voltage	750V AC (rms) for 1 minute
Insulation resistance	10,000M $\Omega$ min. at 100V DC
Contact resistance	20m $\Omega$ max.

## MATERIAL/FINISH

[ Fixed board modules & CompactPCI style P2, P3]	
Contact	Copper alloy/Mating area : Gold over Nickel plating
Housing	PBT resin (UL94V-0)

[ Free board modules & CompactPCI style J2, J3]	
Contact	Copper alloy/Mating area : Gold over Nickel plating
Housing	PBT resin (UL94V-0)
Insulator	PPS resin (UL94V-0)
Link insulator	PBT resin (UL94V-0)
Shield plate	Copper alloy/Mating area : Gold over Nickel plating

## Hard Metric Connector [ IEC 61076-4-101 ]

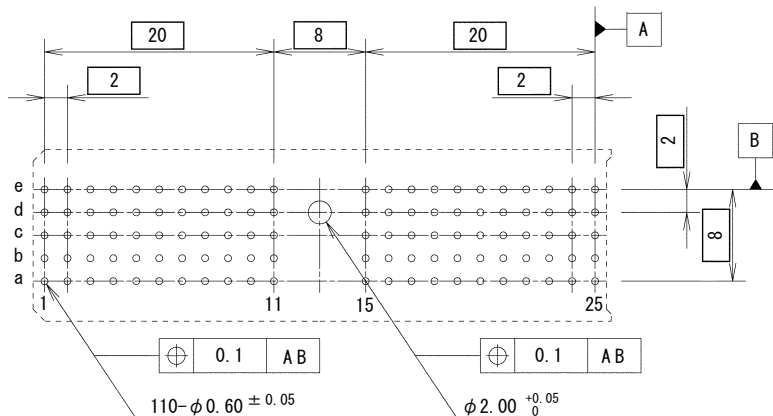
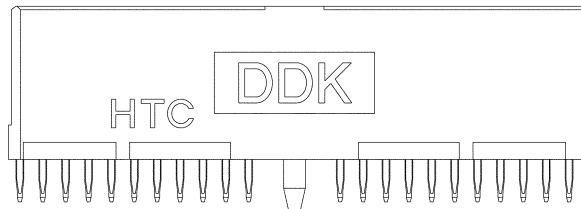
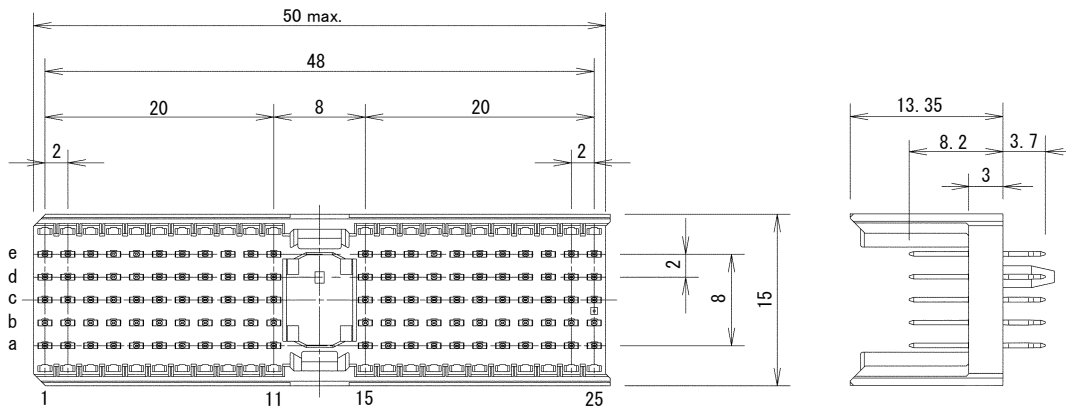
Module style	Fixed Board		Free Board		
	without ground pin	with ground pin	without shield plate	with upper shield plate	with upper and lower shield plate
A	 Page 3	 Page 4	 Page 5	 Page 5	 Page 5
B	 Page 6	 Page 7	 Page 8	 Page 8	 Page 8
C	 Page 9	 Page 10	 Page 11	 Page 11	 Page 11
C Reversed	 Page 12	 Page 13	 Page 14	 Page 14	 Page 14
Compact-PCI P2/J2		 Page 15		 Page 16	
Compact-PCI P3/J3		 Page 17		 Page 18	
Coding Key	 Page 19		 Page 19		

## Hard Metric Backpanel Connector

### IEC 61076-4-101 fixed board modules style A

# HTC-PFA110-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



**PCB Mounting Dimensions**  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

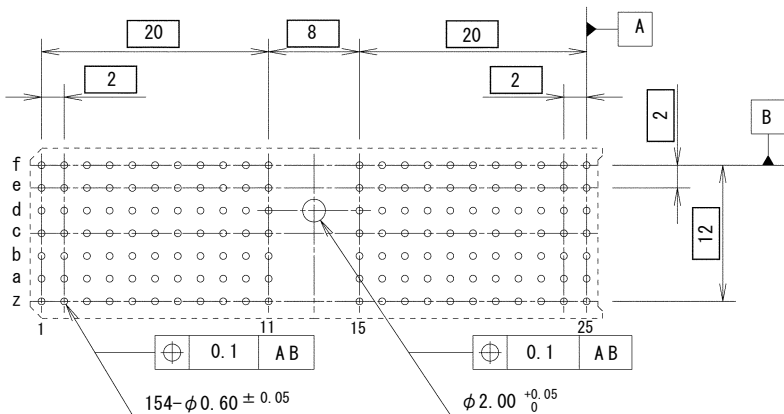
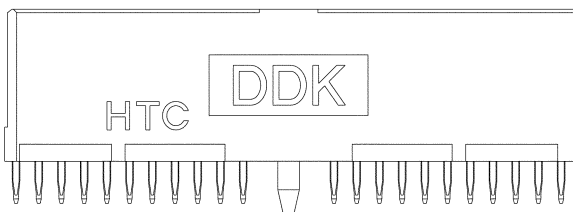
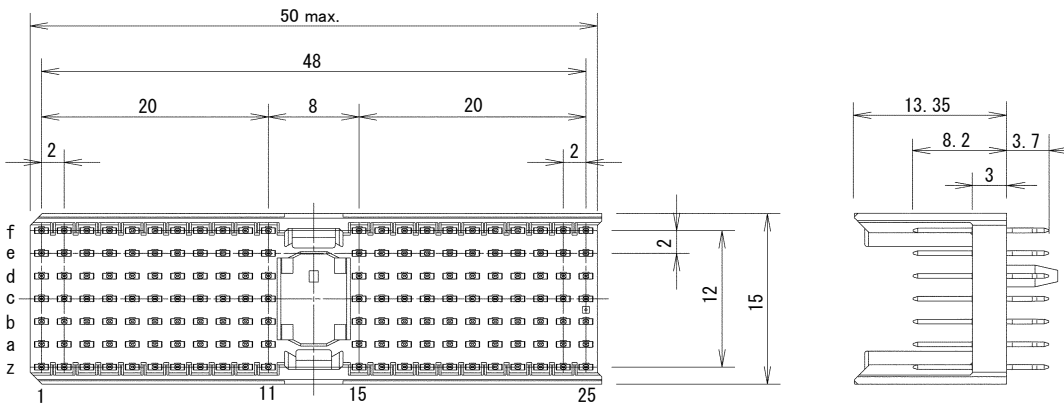


■ Hard Metric Backpanel Connector

IEC 61076-4-101 fixed board modules style A

HTC-PFA154-S1A

- 1: Mating area 0.76 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.





# HTC Series

Unit : mm

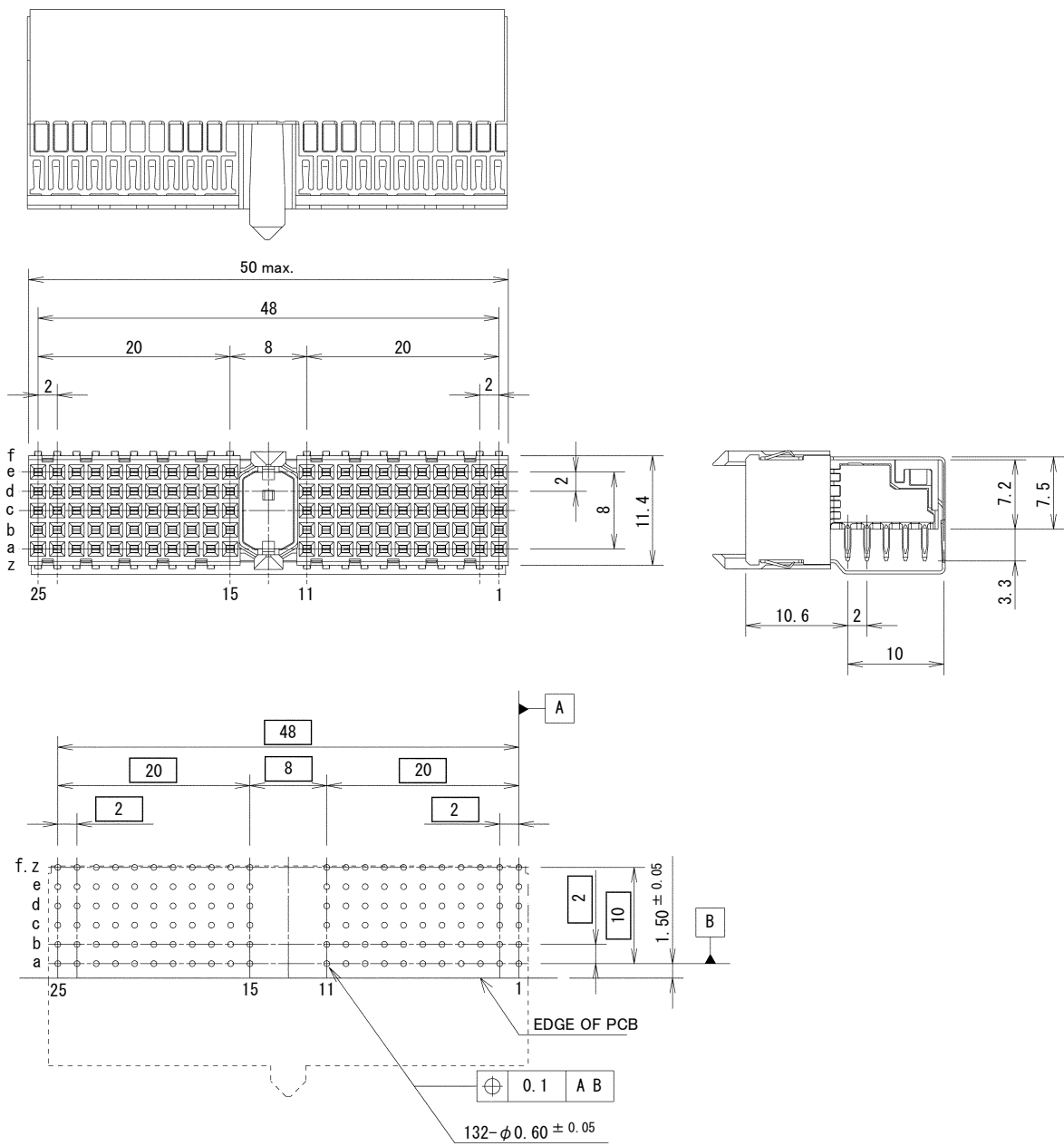
## Hard Metric Daughterboard Connector

### IEC 61076-4-101 free board modules style A

#### HTC-SEA110-R1 **1W**

1: Mating area 0.76  $\mu$  Gold plating  
 2: Mating area 0.40  $\mu$  Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



**PCB Mounting Dimensions**  
 (Connector Mount Side)

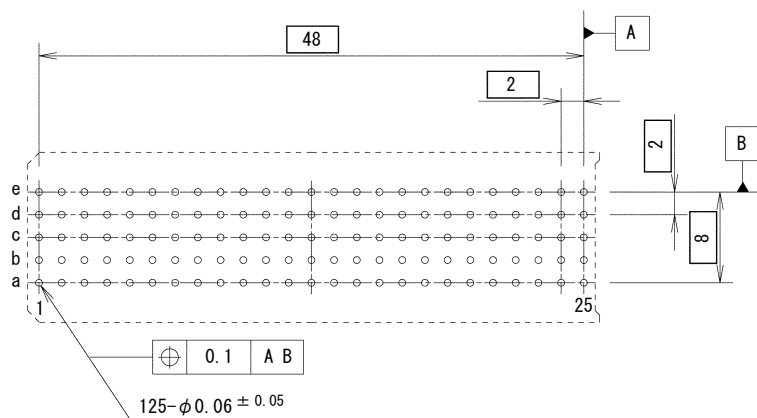
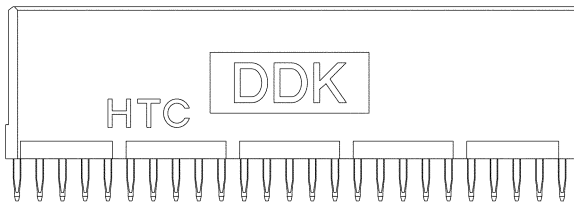
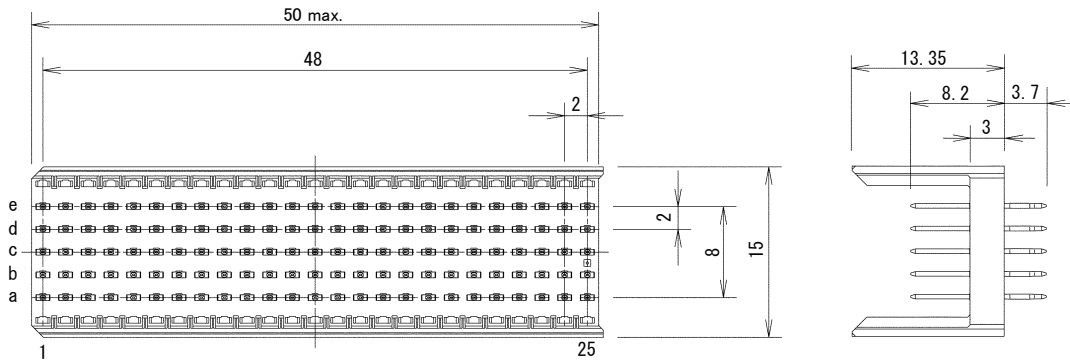
Note: Row f.z is for shield plates.

■ Hard Metric Backpanel Connector

IEC 61076-4-101 fixed board modules style B

HTC-PFB125-S1A

- 1: Mating area 0.76 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

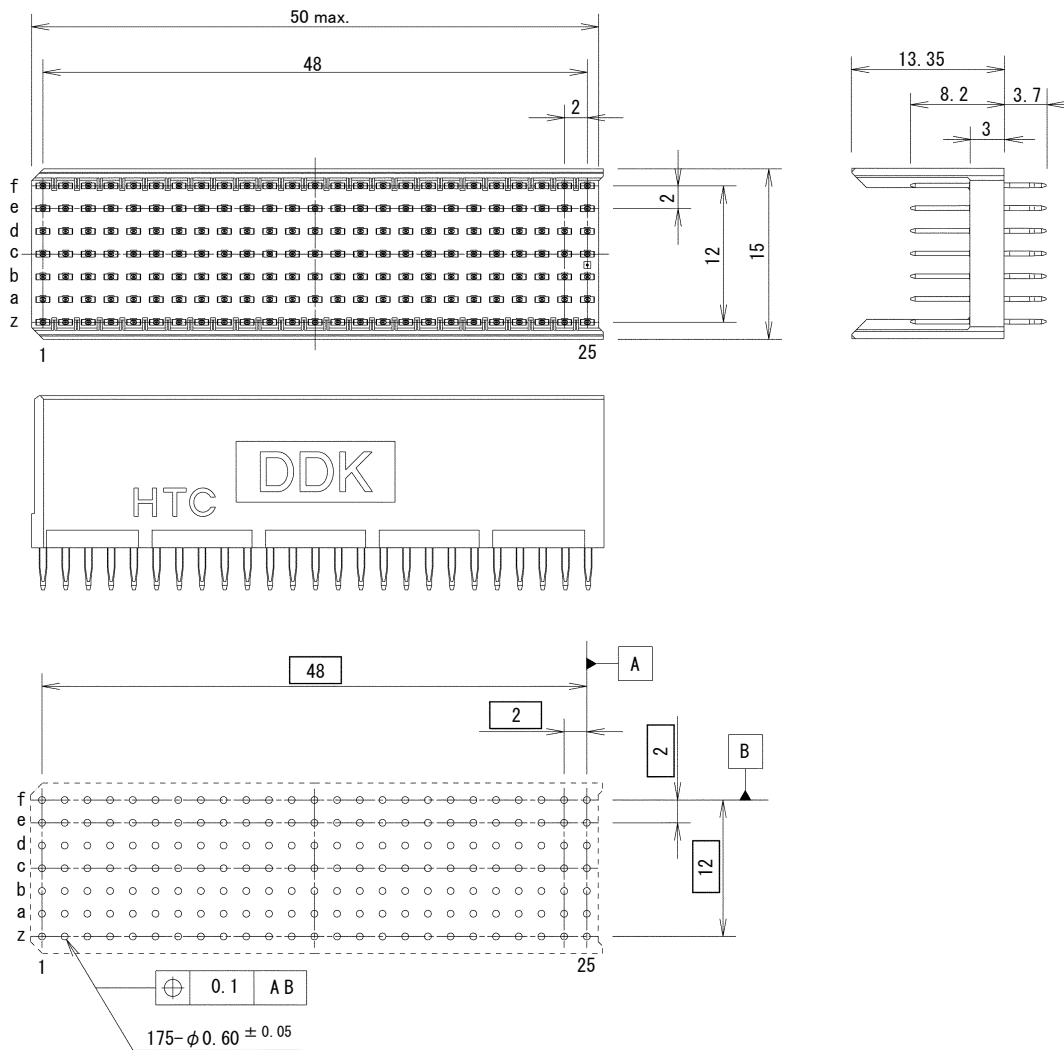
I  
HTC

## Hard Metric Backpanel Connector

### IEC 61076-4-101 fixed board modules style B

#### HTC-PFB175-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.



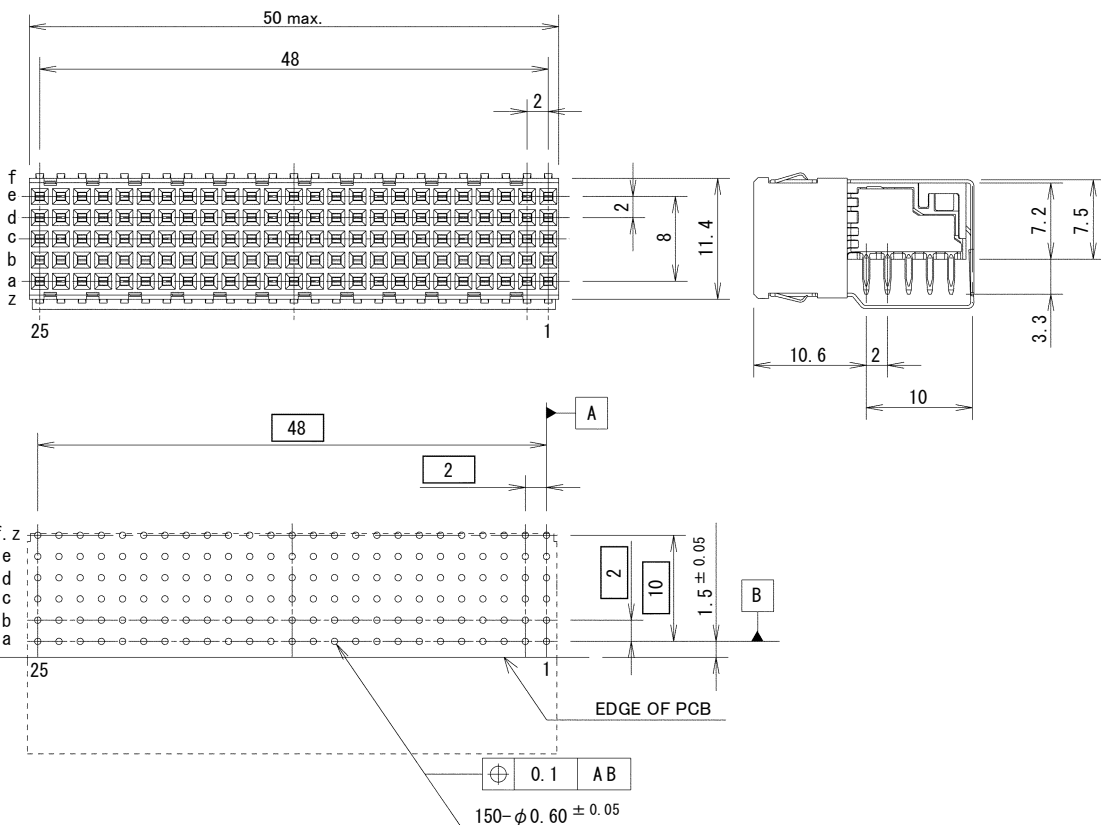
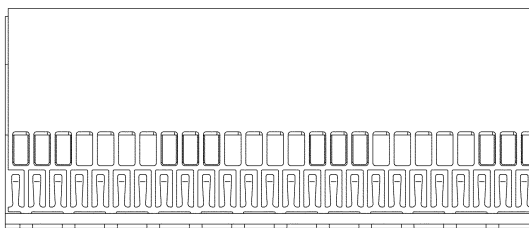
■ Hard Metric Daughterboard Connector

IEC 61076-4-101 free board modules style B

HTC-SEB125-R1 **1W**

1: Mating area 0.76 μ Gold plating  
 2: Mating area 0.40 μ Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



PCB Mounting Dimensions  
 (Connector Mount Side)

Note: Row f.z is for shield plates.

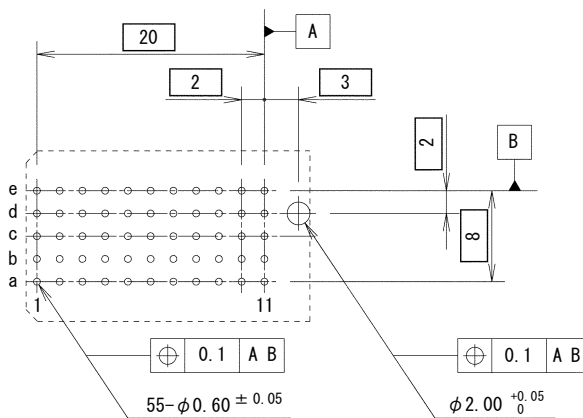
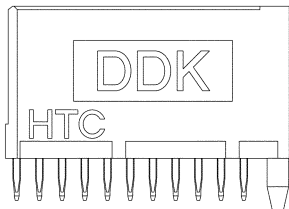
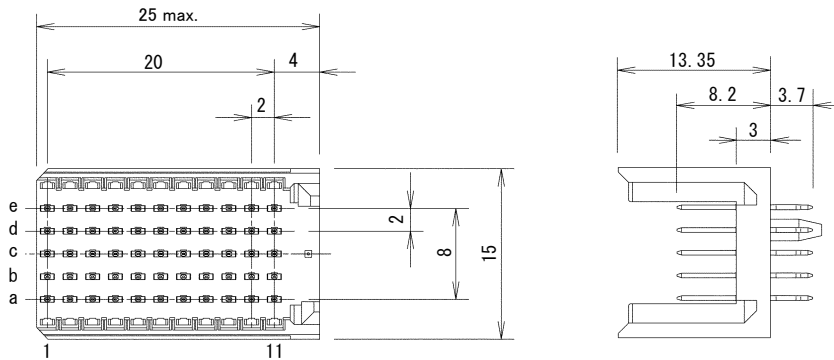


## ■ Hard Metric Backpanel Connector

### IEC 61076-4-101 fixed board modules style C

## HTC-PFA55-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



**PCB Mounting Dimensions**  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

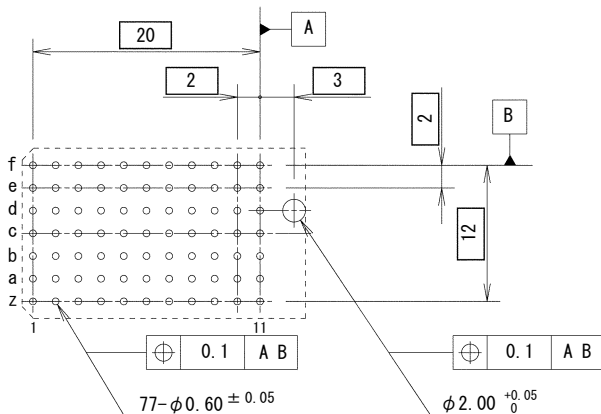
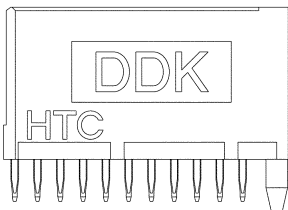
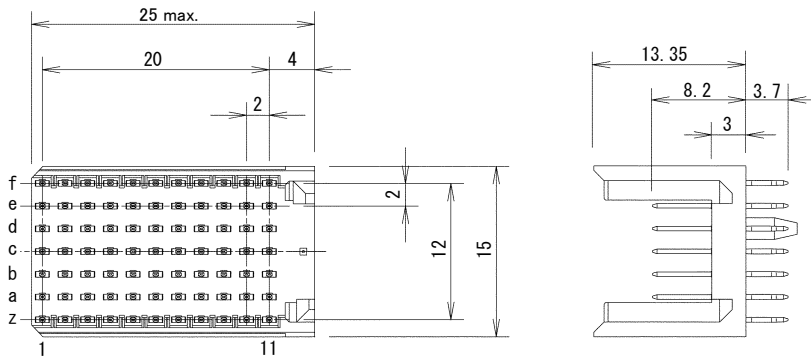


■ Hard Metric Backpanel Connector

IEC 61076-4-101 fixed board modules style C

HTC-PFA77-S1A

- 1: Mating area 0.76 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40 μ Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40 μ Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.



# HTC Series

Unit : mm

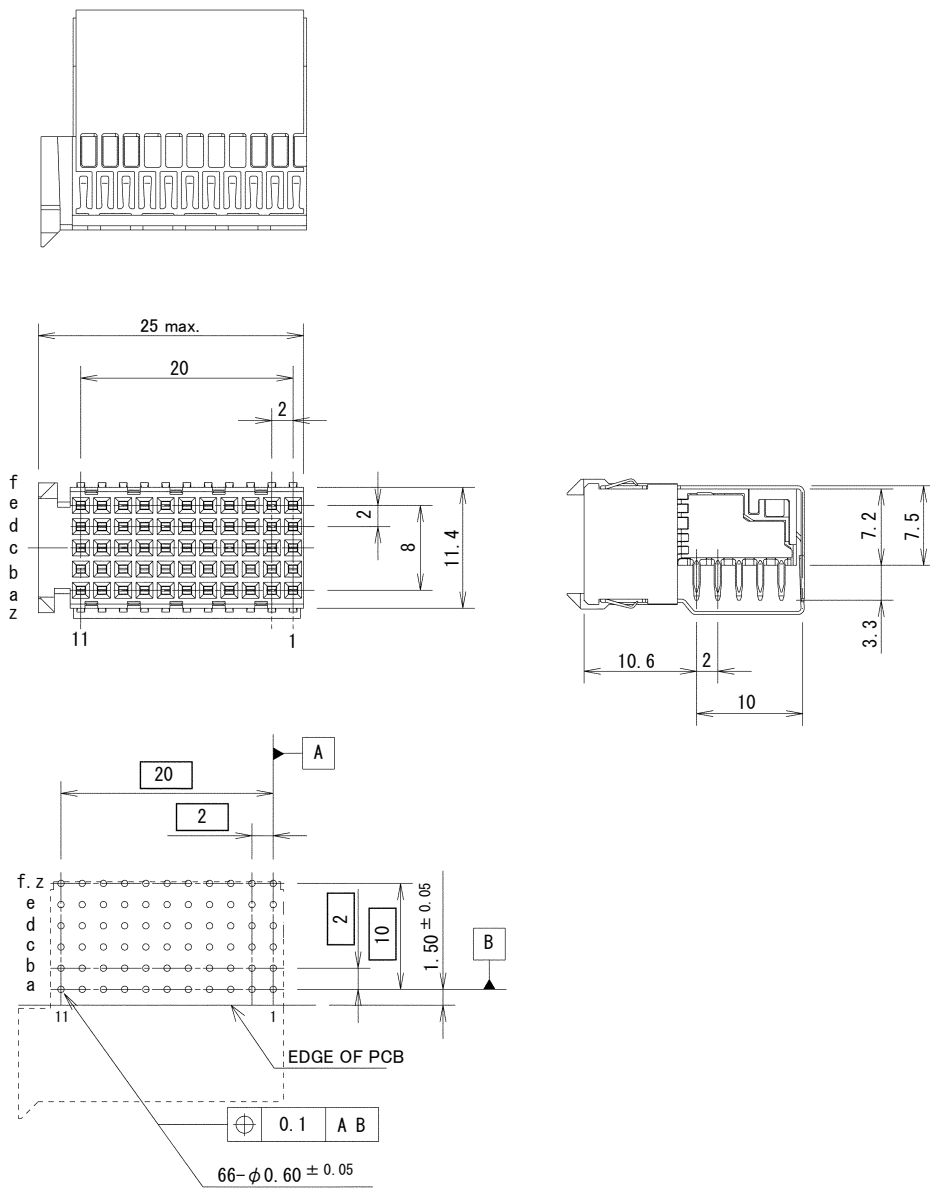
## Hard Metric Daughterboard Connector

### IEC 61076-4-101 free board modules style C

#### HTC-SEA55-R1 **1W**

1: Mating area 0.76  $\mu$  Gold plating  
 2: Mating area 0.40  $\mu$  Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



**PCB Mounting Dimensions**  
(Connector Mount Side)

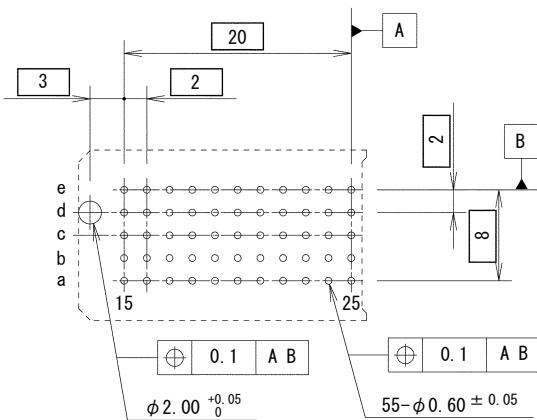
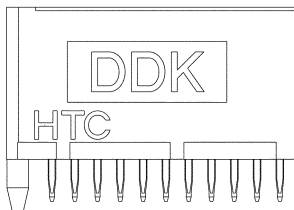
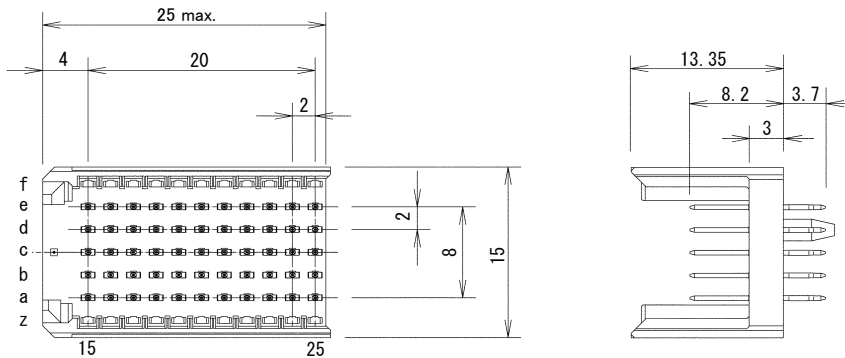
Note: Row f.z is for shield plates.

■ Hard Metric Backpanel Connector

IEC 61076-4-101 fixed board modules style C [Reversed]

HTC-PFR55-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

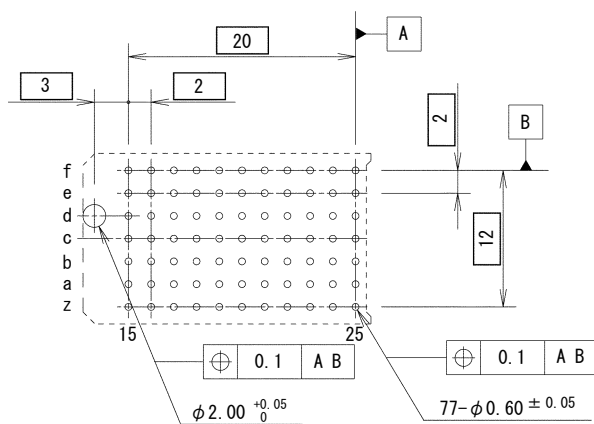
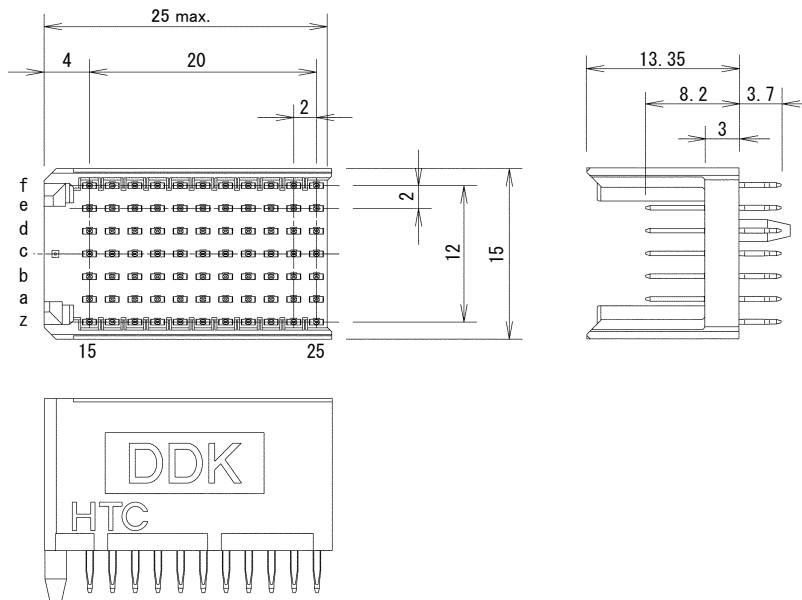


## ■ Hard Metric Backpanel Connector

### IEC 61076-4-101 fixed board modules style C [Reversed]

#### HTC-PFR77-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



**PCB Mounting Dimensions**  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

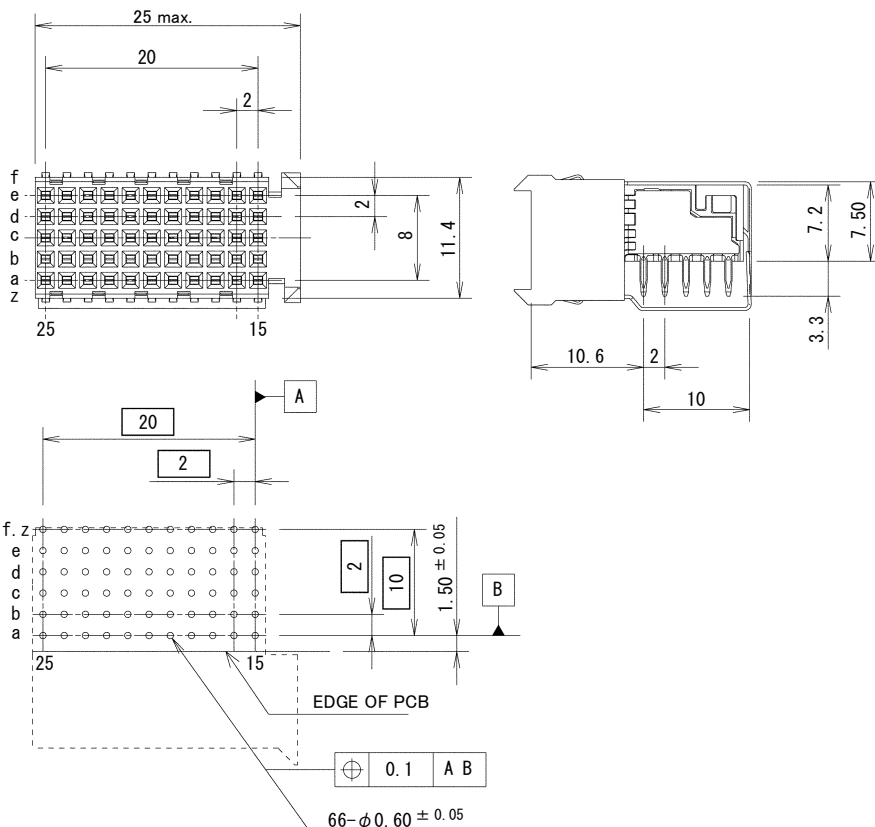
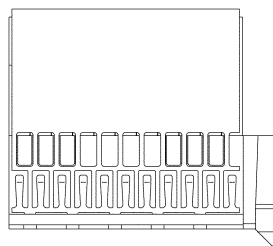
## ■ Hard Metric Daughterboard Connector

### IEC 61076-4-101 free board modules style C [Reversed]

#### HTC-SER55-R1 **1W**

1: Mating area 0.76  $\mu$  Gold plating  
 2: Mating area 0.40  $\mu$  Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



**PCB Mounting Dimensions**  
 (Connector Mount Side)

Note: Row f.z is for shield plates.

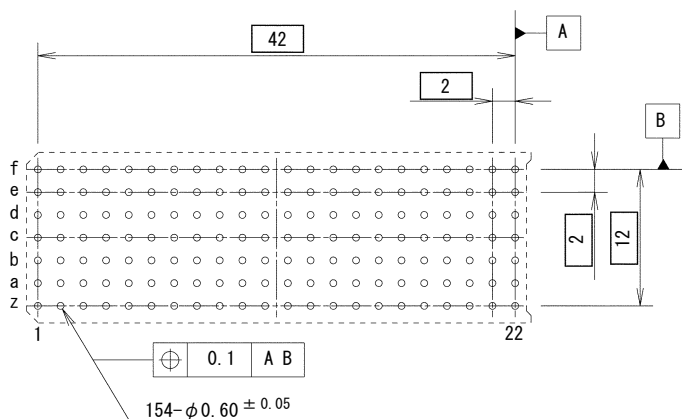
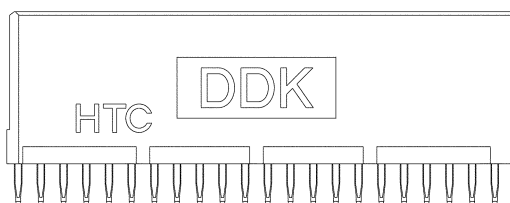
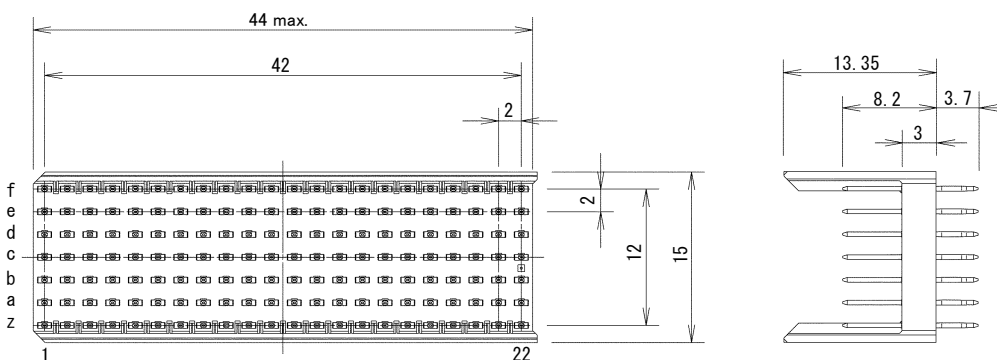


## Hard Metric Backpanel Connector

### CompactPCI style P2

# HTC-PFB154-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



**PCB Mounting Dimensions**  
(Connector Mount Side)

Note: See page 20 for different contact alignment.



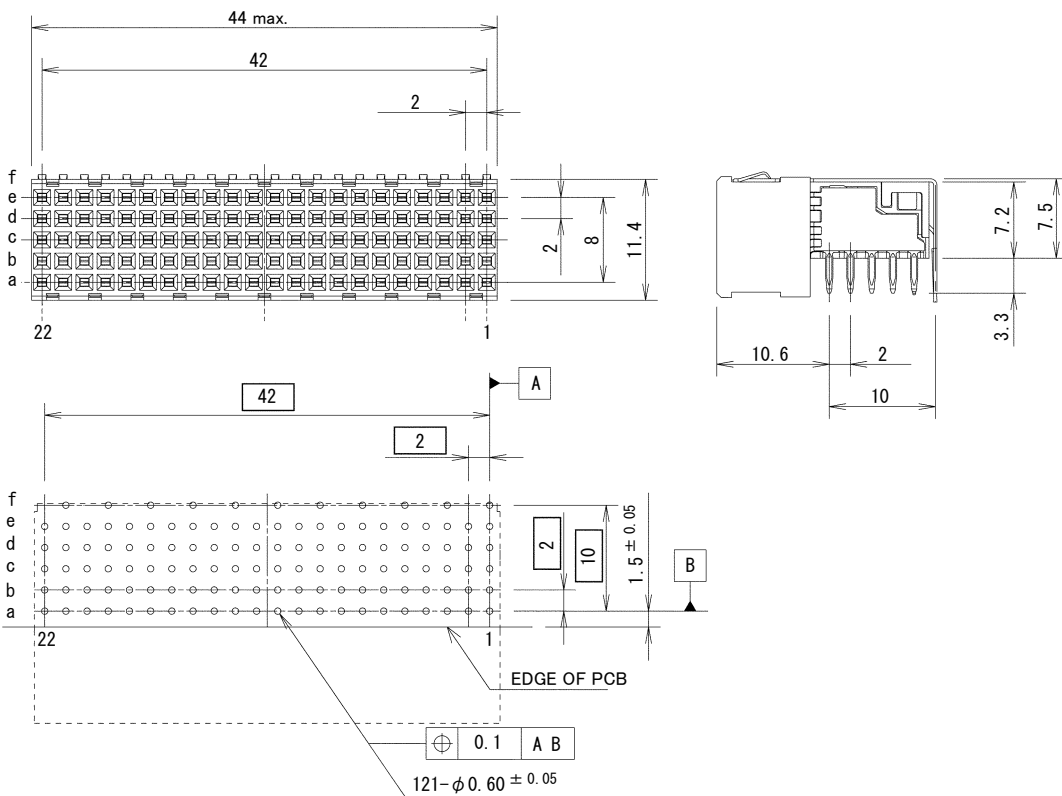
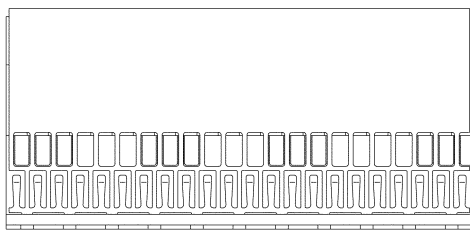
Hard Metric Daughterboard Connector

CompactPCI style J2

HTC-SEB110-R11A

1: Mating area 0.76 μ Gold plating  
 2: Mating area 0.40 μ Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



PCB Mounting Dimensions  
 (Connector Mount Side)

Note: Row f.z is for shield plates.

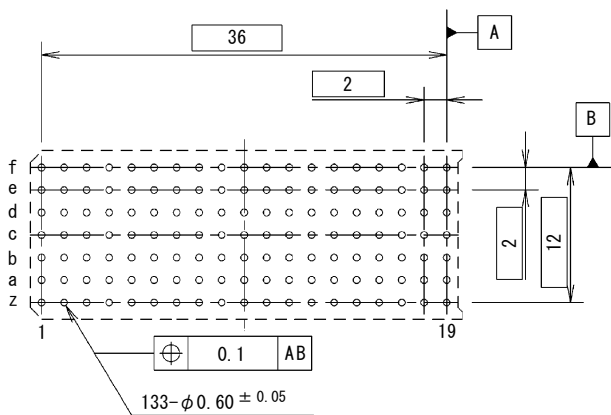
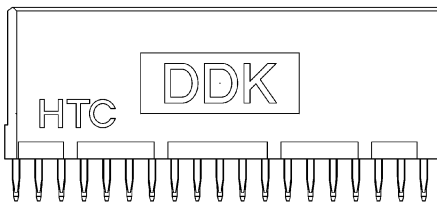
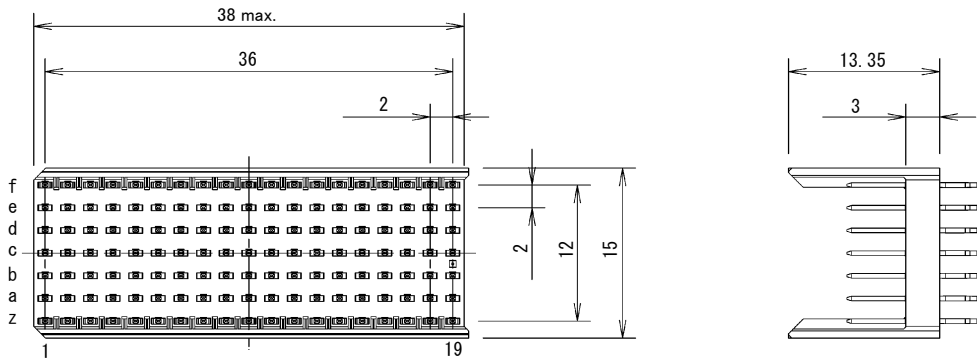


## ■ Hard Metric Backpanel Connector

### CompactPCI style P3

## HTC-PFB133-S1A

- 1: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 2: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Tin-lead plating (Pin contact code A~C)
- 5: Mating area 0.76  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)
- 6: Mating area 0.40  $\mu$  Gold plating  
Press-in part : Gold plating (Pin contact code K~T)



PCB Mounting Dimensions  
(Connector Mount Side)

Note: See page 20 for different contact alignment.

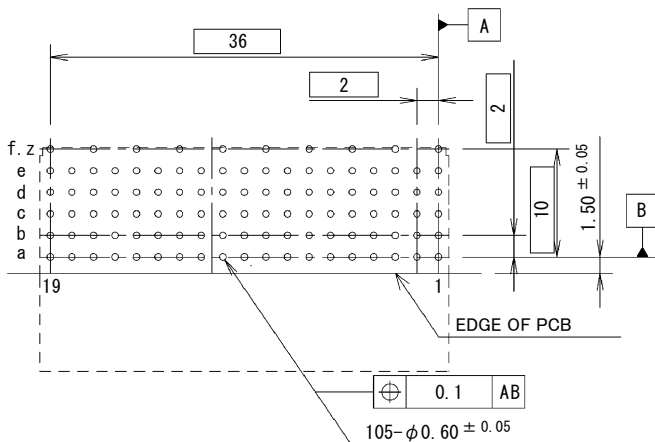
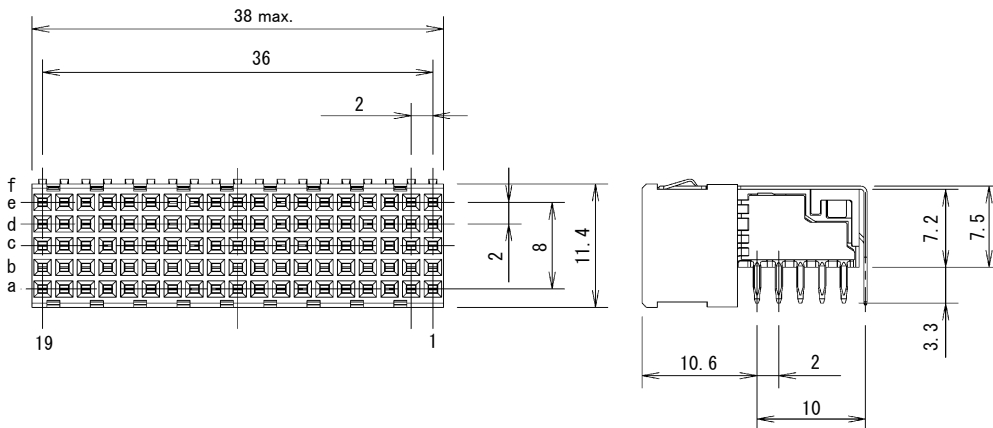
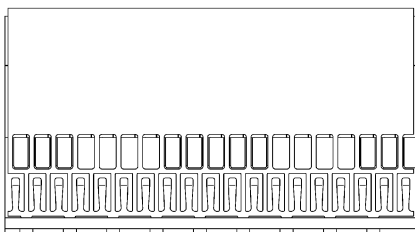
■ Hard Metric Daughterboard Connector

CompactPCI style J3

HTC-SEB95-R1 **1A**

1: Mating area 0.76 μ Gold plating  
 2: Mating area 0.40 μ Gold plating  
 Press-in part : Tin-lead plating

OMIT : without shield plate  
 A : with upper shield plate  
 W : with upper and lower shield plates



PCB Mounting Dimensions  
 (Connector Mount Side)

Note: Row f.z is for shield plates.



# HTC Series

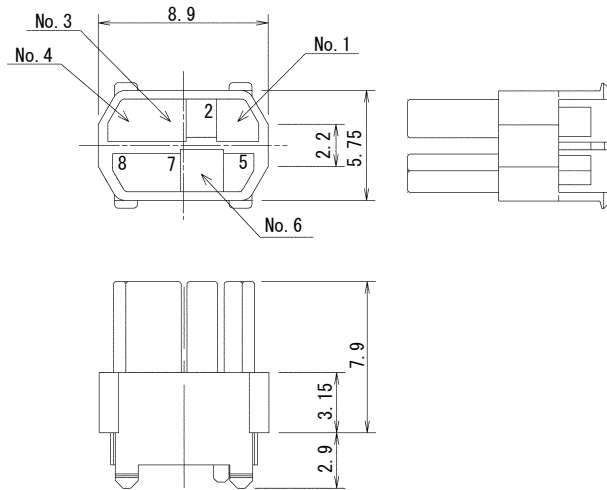
Unit : mm

## ■ Hard Metric Coding Key

### IEC 61076-4-101 fixed board module Key

HTC-A □□□□-430

Key Numbers

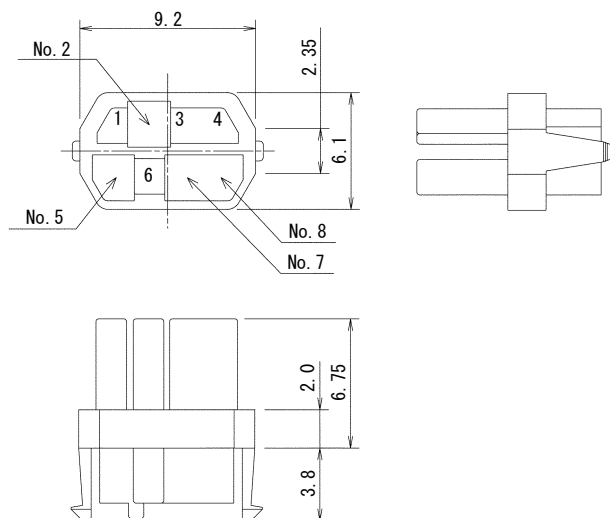


### IEC 61076-4-101 free board module Key

I  
HTC

HTC-B □□□□-430

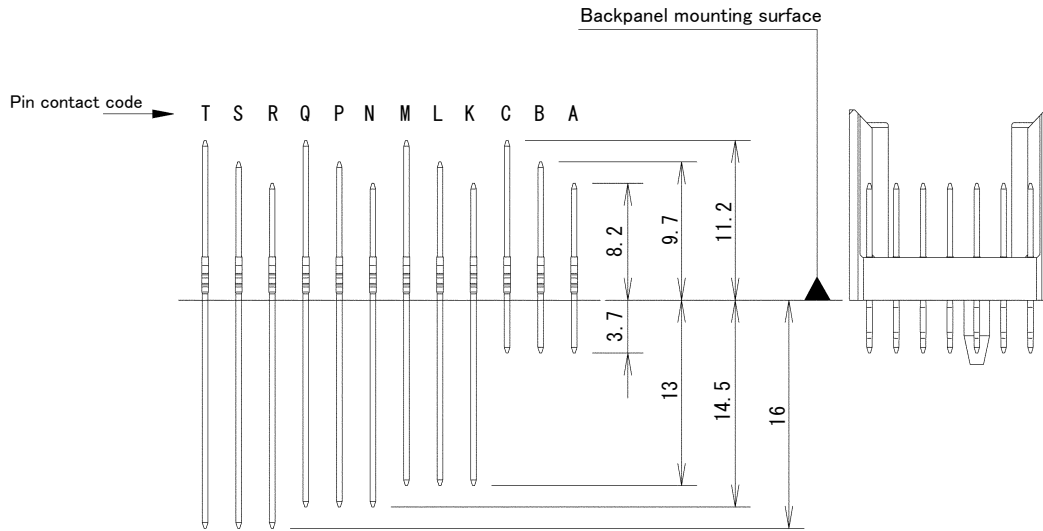
Key Numbers



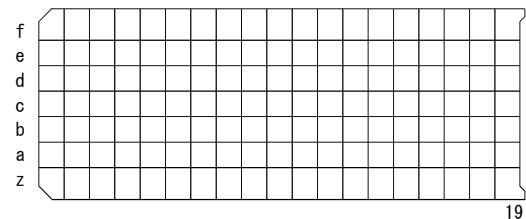
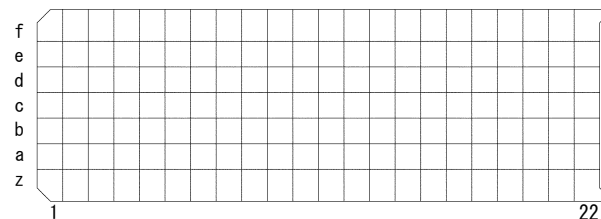
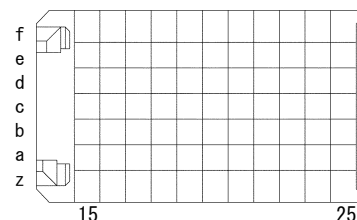
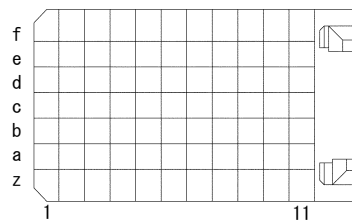
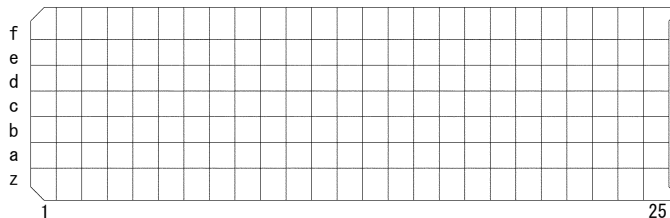
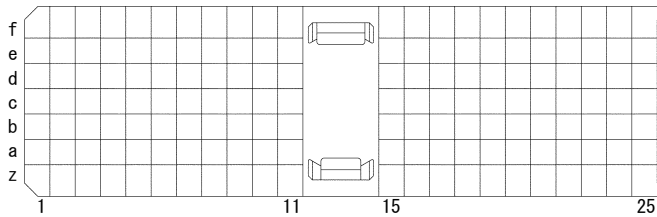
Note: Consult with us to confirm key numbers and color.

■ Hard Metric Various Contact Alignment

Contact Alignment Diagram



Fill out each diagram with pin contact code for different contact length.





## 0.8mm Pitch Stacking Connector



## FEATURE

- PCB stacking connectors with 0.8mm pitch
- 9 available stacking heights: 10mm, and 13–20mm in 1 mm increments
- SMT style contact tails with locking tabs for better stability on PCB
- Mis-mateing prevention structure on mating area
- Friction lock mechanism provides tactile response upon mating of plug and receptacle
- Adsorption cap for vacuum automatic pick and place assembly equipme.

## SPECIFICATION

Rated voltage	100V AC (rms)
Rated current	0.5A / contact
Dielectric withstanding voltage	350V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 250V DC
Contact resistance	45m $\Omega$ max.

## MATERIAL/FINISH

Contact	Copper alloy / Gold over Nickel plating (Mating), Tin-Lead (Tail)
Insulator	LCP resin (UL94V-0) / Black
Locking tab	Copper alloy / Nickel over Tin plating

## ■ Plug Connector

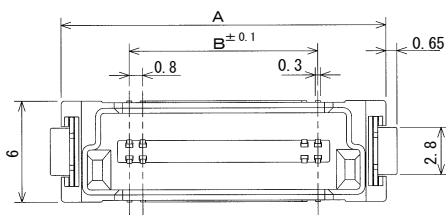
### DFJ-PC030-S931 130D

Number of contacts 020 : 20pin 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 :100pin 120 :120pin * 1 140 :140pin * 2 160 :160pin	D : with lock
Connector height 080 : 8.0mm 110 :11.0mm 120 :12.0mm 130 :13.0mm	

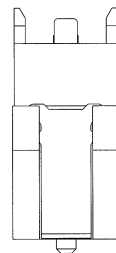
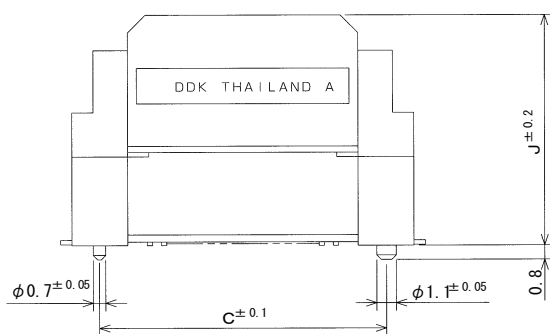
\*1 : 140-pin is under planning.

\*2 : 160-pin size available only in 8.0mm height.

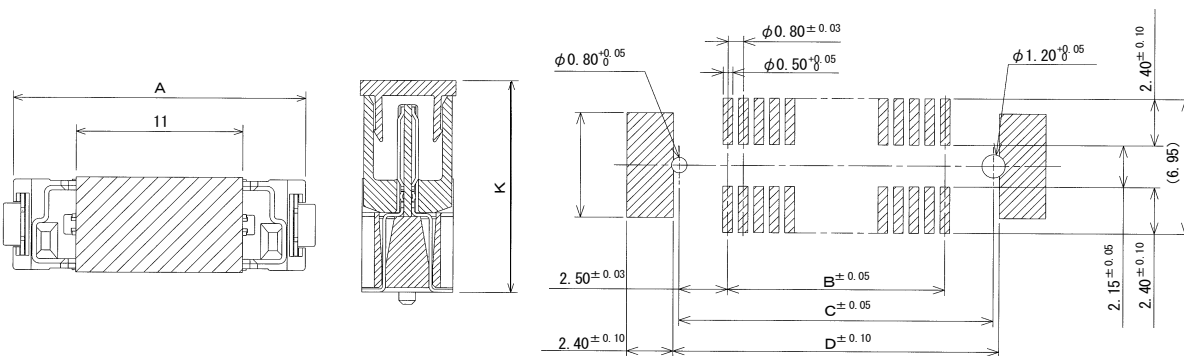
P/N	A	B	C	D
DFJ-PC020-S931□□□D	15.3	7.2	12.2	12.8
DFJ-PC030-S931□□□D	19.3	11.2	16.2	16.8
DFJ-PC040-S931□□□D	23.3	15.2	20.2	20.8
DFJ-PC060-S931□□□D	31.3	23.2	28.2	28.8
DFJ-PC080-S931□□□D	39.3	31.2	36.2	36.8
DFJ-PC100-S931□□□D	47.3	39.2	44.2	44.8
DFJ-PC120-S931□□□D	55.3	47.2	52.2	52.8
DFJ-PC140-S931□□□D	63.3	55.2	60.2	60.8
DFJ-PC160-S931□□□D	71.3	63.2	68.2	68.8



## J DFJ



P/N	J	K
DFJ-PC□□□-S931080D	8.0	9.0
DFJ-PC□□□-S931110D	11.0	12.0
DFJ-PC□□□-S931120D	12.0	13.0
DFJ-PC□□□-S931130D	13.0	14.0



Adsorption cap mounting dimensions    Adsorption cap mounting height    Recommend PCB dimensions

# DFJ Series

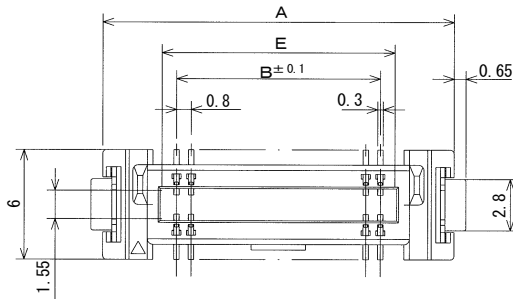
Unit : mm

## Receptacle Connector

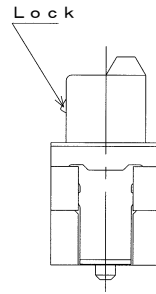
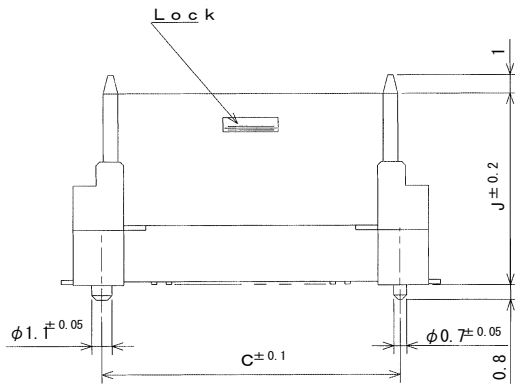
### DFJ-RC030-S931 104D

<b>Number of contacts</b> 020 : 20pin 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 : 100pin 120 : 120pin * 1 140 : 140pin * 2 160 : 160pin	<b>N : with out lock</b> <b>D : with lock</b>
<b>Connector height</b> 074 : 7.4mm 104 : 10.4mm 114 : 11.4mm 124 : 12.4mm	

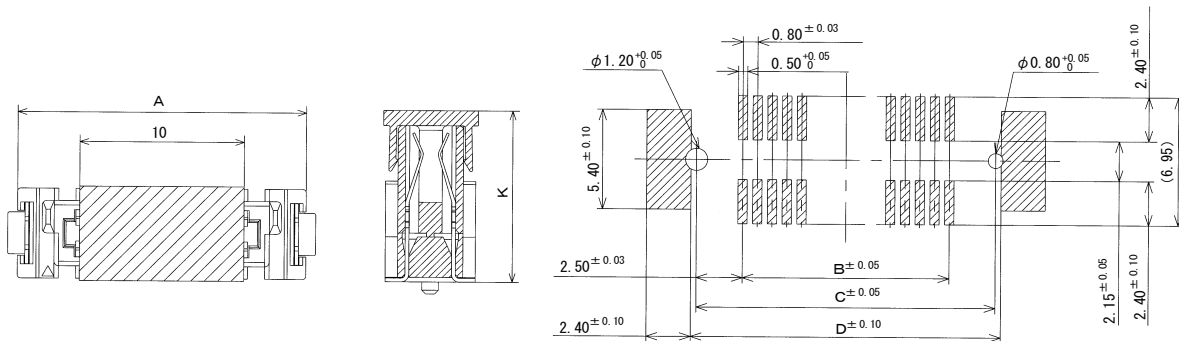
- \*1 : 140-pin is under planning.
- \*2 : 160-pin size available only in 8.0mm height



P/N	A	B	C	D	E
DFJ-RC020-S931□□□	15.3	7.2	12.2	12.8	8.8
DFJ-RC030-S931□□□	19.3	11.2	16.2	16.8	12.8
DFJ-RC040-S931□□□	23.3	15.2	20.2	20.8	16.8
DFJ-RC060-S931□□□	31.3	23.2	28.2	28.8	24.8
DFJ-RC080-S931□□□	39.3	31.2	36.2	36.8	32.8
DFJ-RC100-S931□□□	47.3	39.2	44.2	44.8	40.8
DFJ-RC120-S931□□□	55.3	47.2	52.2	52.8	48.8
DFJ-RC140-S931□□□	63.3	55.2	60.2	60.8	56.8
DFJ-RC160-S931□□□	71.3	63.2	68.2	68.8	64.8



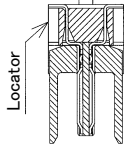
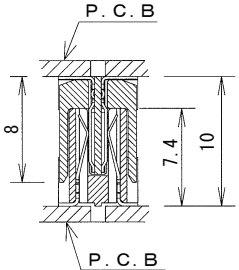
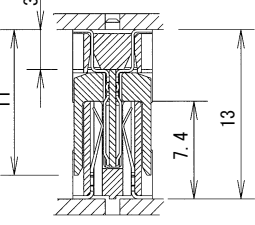
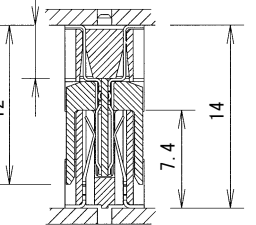
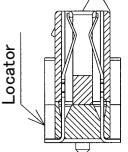
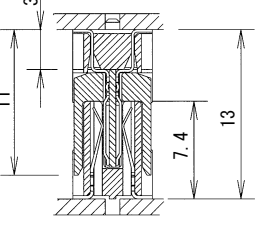
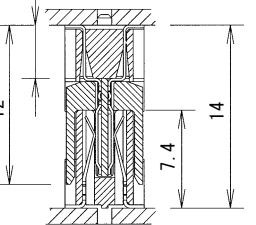
P/N	J	K
DFJ-RC□□□-S931074□	7.4	8.4
DFJ-RC□□□-S931104□	10.4	11.4
DFJ-RC□□□-S931114□	11.4	12.4
DFJ-RC□□□-S931124□	12.4	13.4

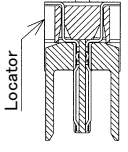
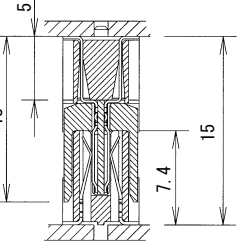
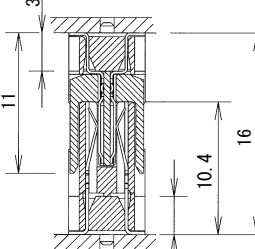
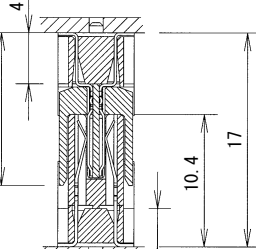
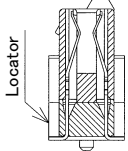
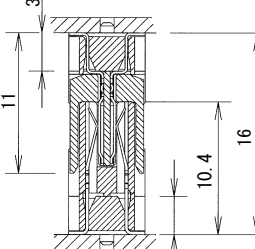
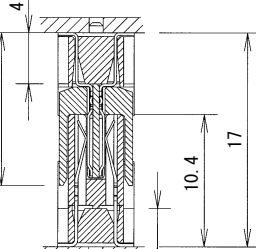


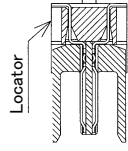
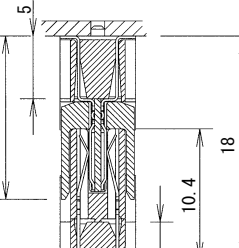
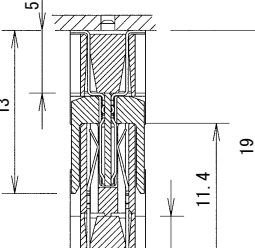
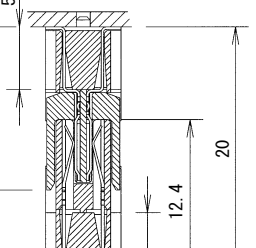
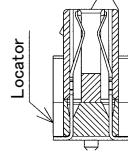
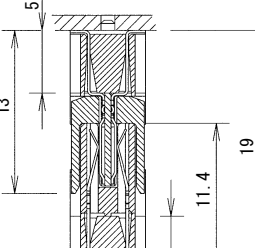
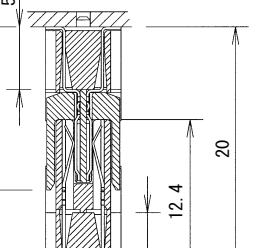
Adsorption cap mounting dimensions    Adsorption cap mounting height    Recommend PCB dimensions



## Connector mating height

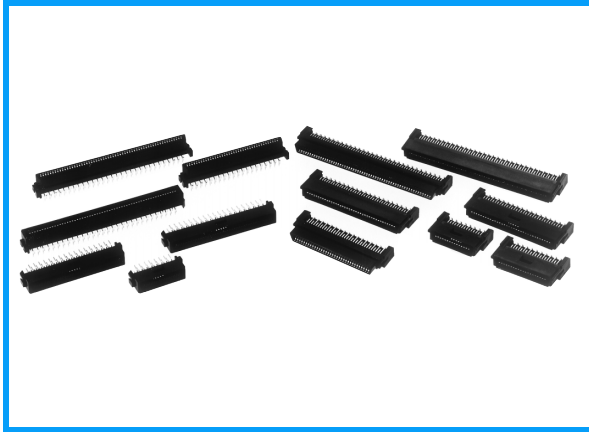
Stack height		10mm	13mm	14mm
Plug	Part number	DFJ-PC □□□ -S931080D	DFJ-PC □□□ -S931110D	DFJ-PC □□□ -S931120D
	Locator height	—	3mm	4mm
				
	Receptacle			
Part number		DFJ-RC □□□ -S931074 □	DFJ-RC □□□ -S931074 □	DFJ-RC □□□ -S931074 □
Locator height		—	—	—

Stack height		15mm	16mm	17mm
Plug	Part number	DFJ-PC □□□ -S931130D	DFJ-PC □□□ -S931110D	DFJ-PC □□□ -S931120D
	Locator height	5mm	3mm	4mm
				
	Receptacle			
Part number		DFJ-RC □□□ -S931074 □	DFJ-RC □□□ -S931104 □	DFJ-RC □□□ -S931104 □
Locator height		—	3mm	3mm

Stack height		18mm	19mm	20mm
Plug	Part number	DFJ-PC □□□ -S931130D	DFJ-PC □□□ -S931130D	DFJ-PC □□□ -S931130D
	Locator height	5mm	5mm	5mm
				
	Receptacle			
Part number		DFJ-RC □□□ -S931104 □	DFJ-RC □□□ -S931114 □	DFJ-RC □□□ -S931124 □
Locator height		3mm	4mm	5mm

J  
DFJ

## 1.27mm centerline Two-piece Connectors Board to Board and Board to Cable Connections



- High density board to board, board to cable (with DHD series) and board stacking connections

### FEATURE

- Space saving 1.27mm centerline
- Highly-reliable, scoop-proof cantilever contact design
- “D”-shape shell polarization to eliminate connector mis-mating
- Bi-level contact tails to ease assembly into PCB holes
- With snap-lock pins plus four kinked contact tails to secure connector on PCB for soldering
- Intermateable with half-pitch (1.27mm centerline) IDC flat ribbon cable connectors for board to cable connection

### SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 500V DC
Contact resistance	35m $\Omega$ max.at 10mA DC

### MATERIAL/FINISH

Contact	Copper alloy/Gold over Nickel plating
Insulator	PBT resin (UL94V-0)
Snap lock pin	Copper alloy/Solder plating
Hold pin	Copper alloy/Ni plating (Stacking type)

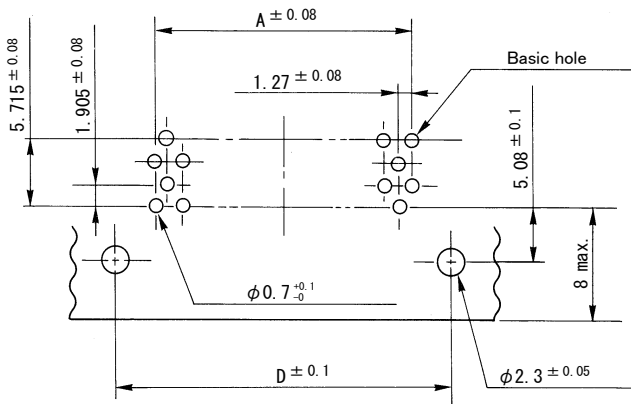
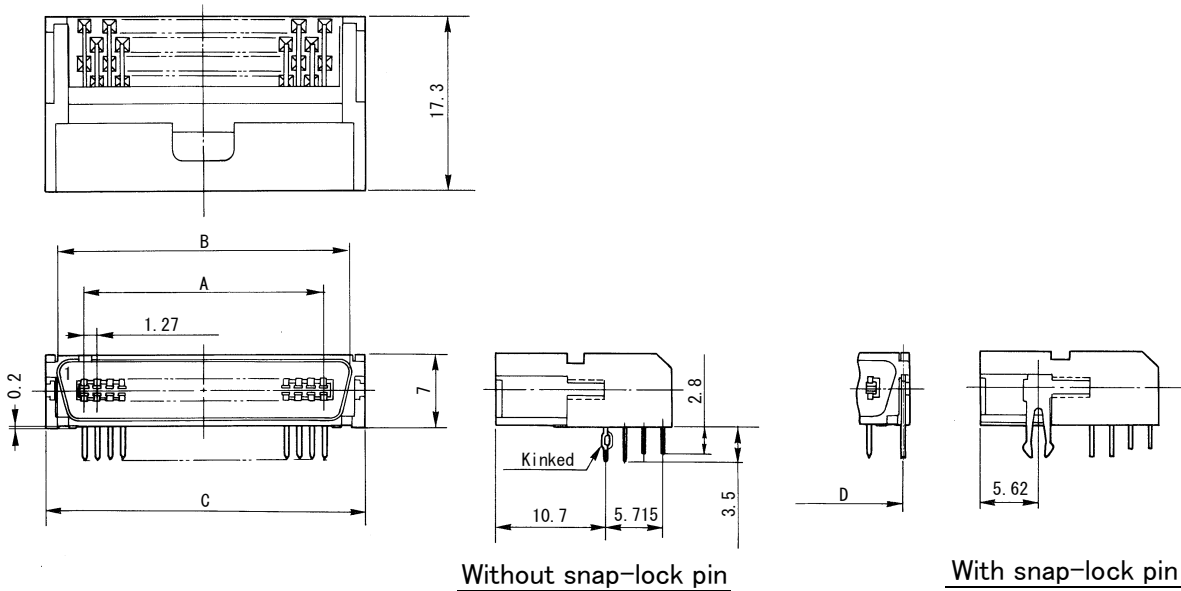
Right Angle Plug

DHB-PA50-R131N

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

**CONTACT PLATING**  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



PCB mounting dimensions  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.58	20.03	18.54
30	17.78	22.93	26.38	24.89
34	20.32	25.47	28.92	27.43
40	24.13	29.28	32.73	31.24
50	30.48	35.63	39.08	37.59
60	36.83	41.98	45.43	43.94
68	41.91	47.06	50.51	49.02
80	49.53	54.68	58.13	56.64
100	62.23	67.38	70.83	69.34
120	74.93	80.08	83.53	82.04

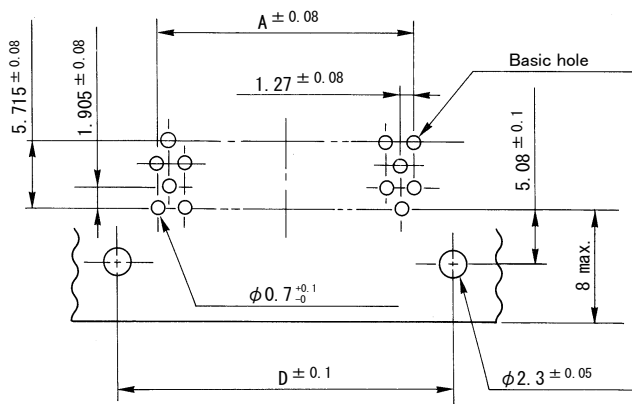
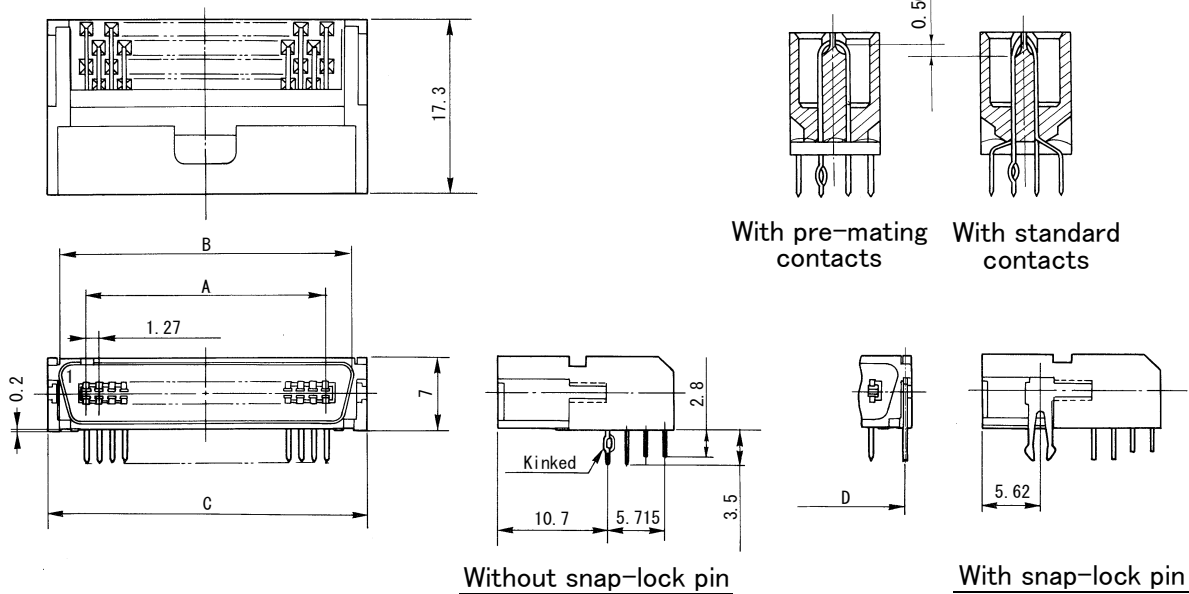
## Right Angle Plug (Pre-mating Contact)

### DHB-PG50-R131N

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



**PCB mounting dimensions**  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.58	20.03	18.54
30	17.78	22.93	26.38	24.89
34	20.32	25.47	28.92	27.43
40	24.13	29.28	32.73	31.24
50	30.48	35.63	39.08	37.59
60	36.83	41.98	45.43	43.94
68	41.91	47.06	50.51	49.02
80	49.53	54.68	58.13	56.64
100	62.23	67.38	70.83	69.34
120	74.93	80.08	83.53	82.04

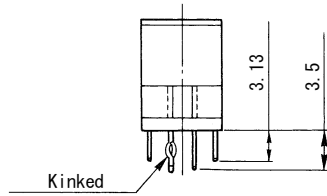
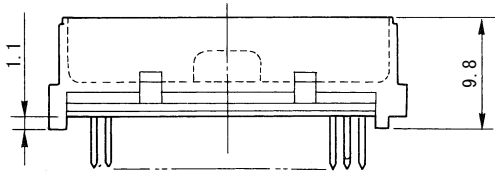
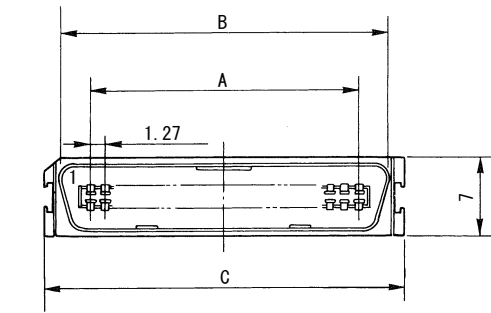
■ Straight Plug

DHB-PB50-R131N

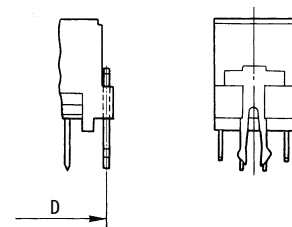
**NO. OF CONTACTS**  
20, 26, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

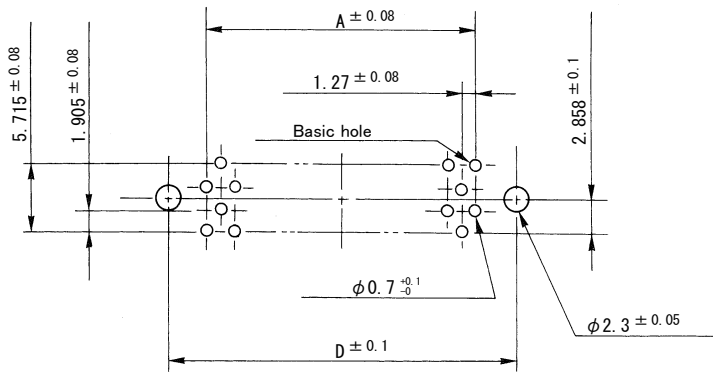
**CONTACT PLATING**  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



Without snap-lock pin



With snap-lock pin



PCB mounting dimensions  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)

$1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.58	20.03	18.54
26	15.24	20.39	23.84	22.35
30	17.78	22.93	26.38	24.89
34	20.32	25.47	28.92	27.43
40	24.13	29.28	32.73	31.24
50	30.48	35.63	39.08	37.59
60	36.83	41.98	45.43	43.94
68	41.91	47.06	50.51	49.02
80	49.53	54.68	58.13	56.64
100	62.23	67.38	70.83	69.34
120	74.93	80.08	83.53	82.04





## ■ Straight Plug (Pre-mating Contact)

### DHB-PH50-R131N10

**NO. OF CONTACTS**

 20, 26, 30, 34, 40, 50, 60, 68, 80,  
100, 120

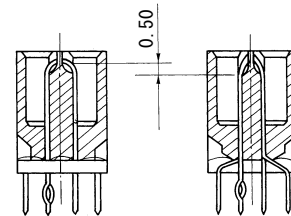
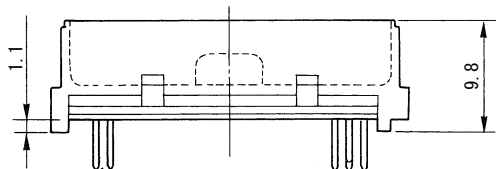
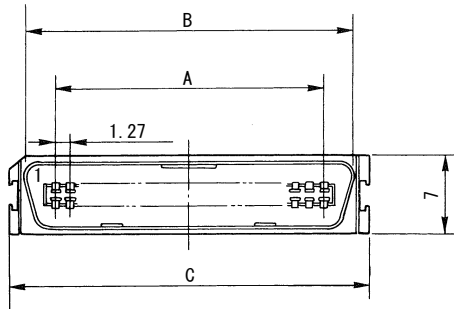
**CONTACT PLATING**

 1: 0.76  $\mu$ m Gold over Nickel  
 2: 0.25  $\mu$ m Gold over Nickel  
 3: Gold flash over Nickel  
 Tail···Solder plating

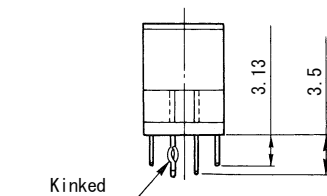
**PRE-MATING CONTACT**  
 (see below)

 10: 4 contacts  
 (each 2 contacts both end)  
 11: 8 contacts  
 (each 4 contacts both end)

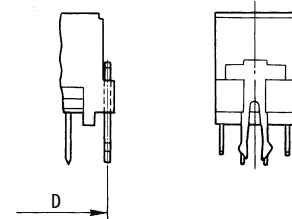
**SNAP LOCK PIN**

 N: Without snap-lock pin  
 1: With snap-lock pin


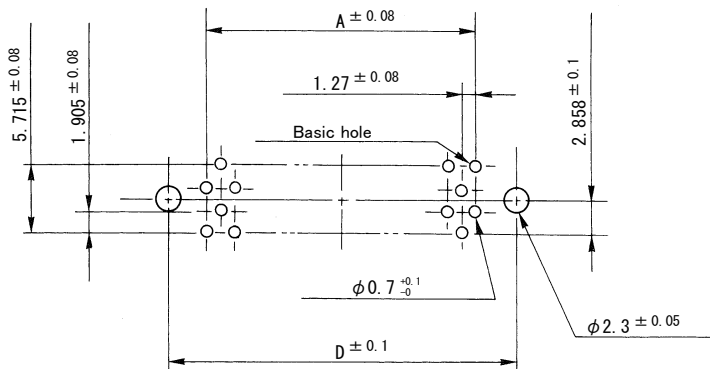
With pre-mating contacts      With standard contacts



Without snap-lock pin



With snap-lock pin


**PCB mounting dimensions**  
 (Connector mount side)

 PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)

 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.58	20.03	18.54
26	15.24	20.39	23.84	22.35
30	17.78	22.93	26.38	24.89
34	20.32	25.47	28.92	27.43
40	24.13	29.28	32.73	31.24
50	30.48	35.63	39.08	37.59
60	36.83	41.98	45.43	43.94
68	41.91	47.06	50.51	49.02
80	49.53	54.68	58.13	56.64
100	62.23	67.38	70.83	69.34
120	74.93	80.08	83.53	82.04

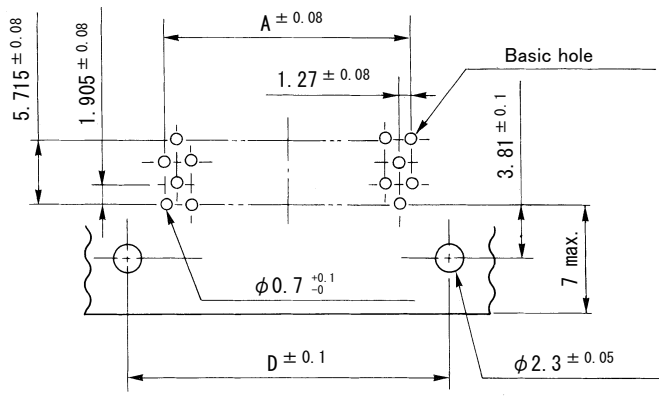
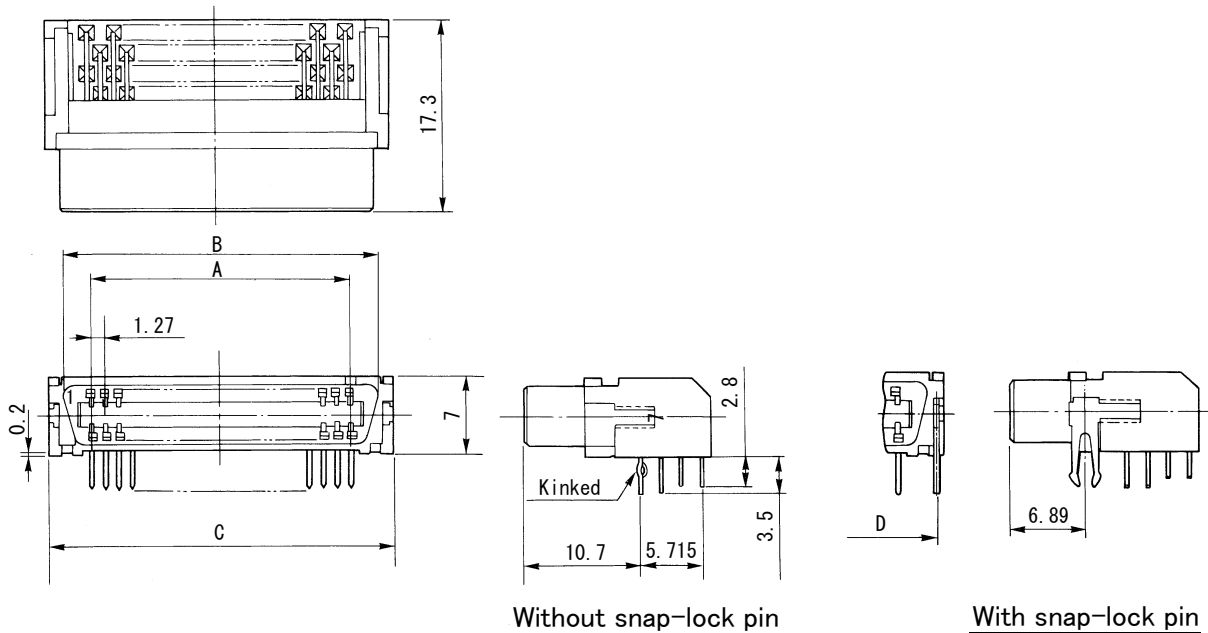
Right Angle Receptacles

DHB-RA50-R131N

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

**CONTACT PLATING**  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



PCB mounting dimensions  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.48	20.03	18.54
30	17.78	22.83	26.38	24.89
34	20.32	25.37	28.92	27.43
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
60	36.83	41.88	45.43	43.94
68	41.91	46.96	50.51	49.02
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34
120	74.93	79.98	83.53	82.04



## Right Angle Receptacles (Pre-mating Contact)

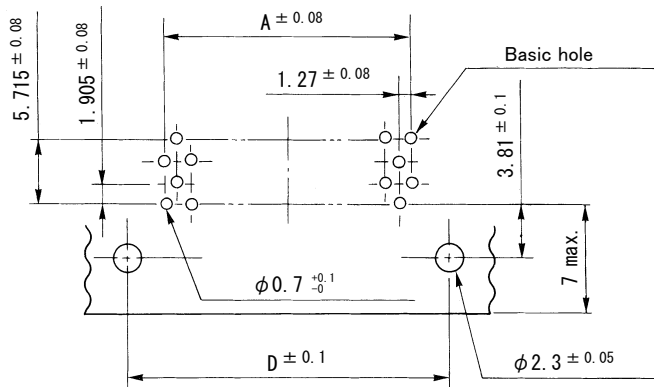
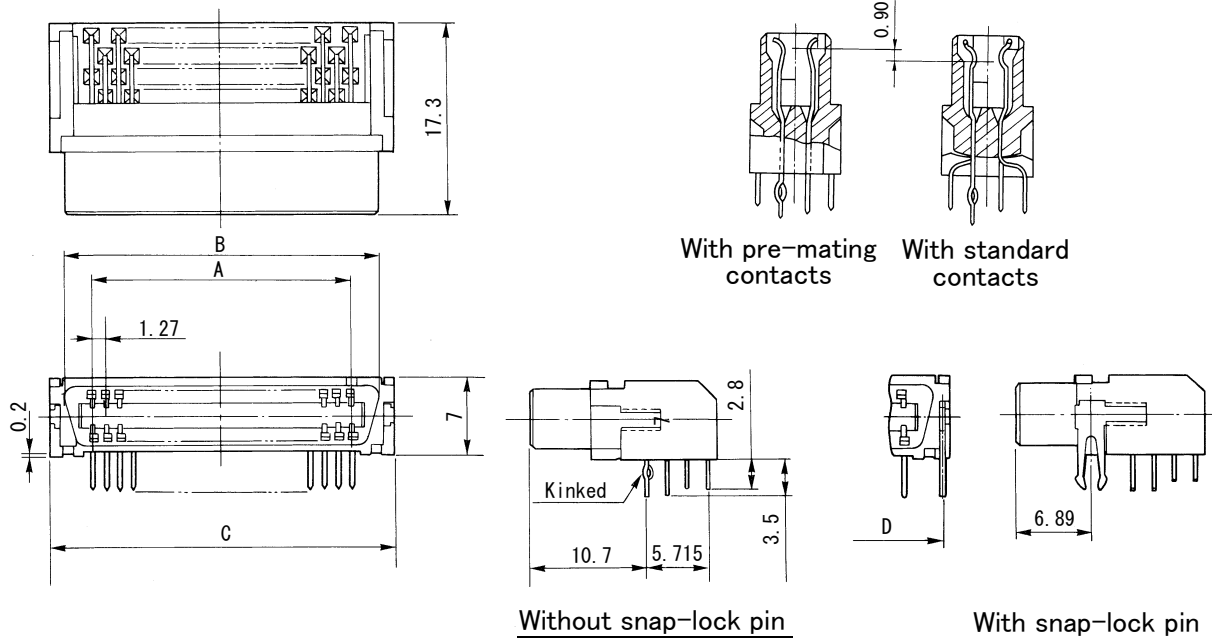
### DHB-RG50-R131N10

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating

**PRE-MATING CONTACT**  
(see below)  
10: 4 contacts  
(each 2 contacts both end)  
11: 8 contacts  
(each 4 contacts both end)

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin



**PCB mounting dimensions**  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6 \pm 0.19$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.48	20.03	18.54
30	17.78	22.83	26.38	24.89
34	20.32	25.37	28.92	27.43
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
60	36.83	41.88	45.43	43.94
68	41.91	46.96	50.51	49.02
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34
120	74.93	79.98	83.53	82.04

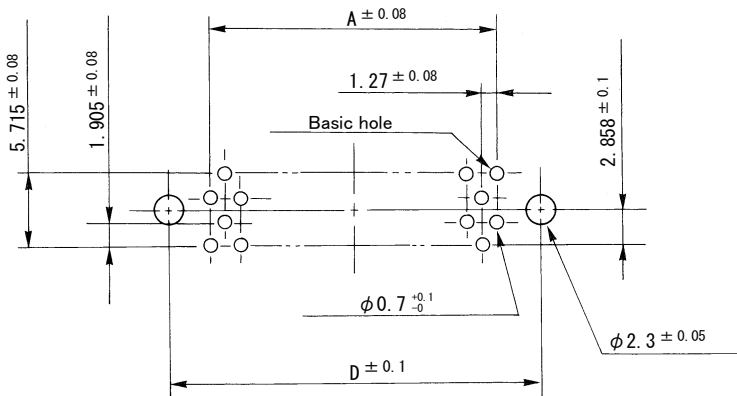
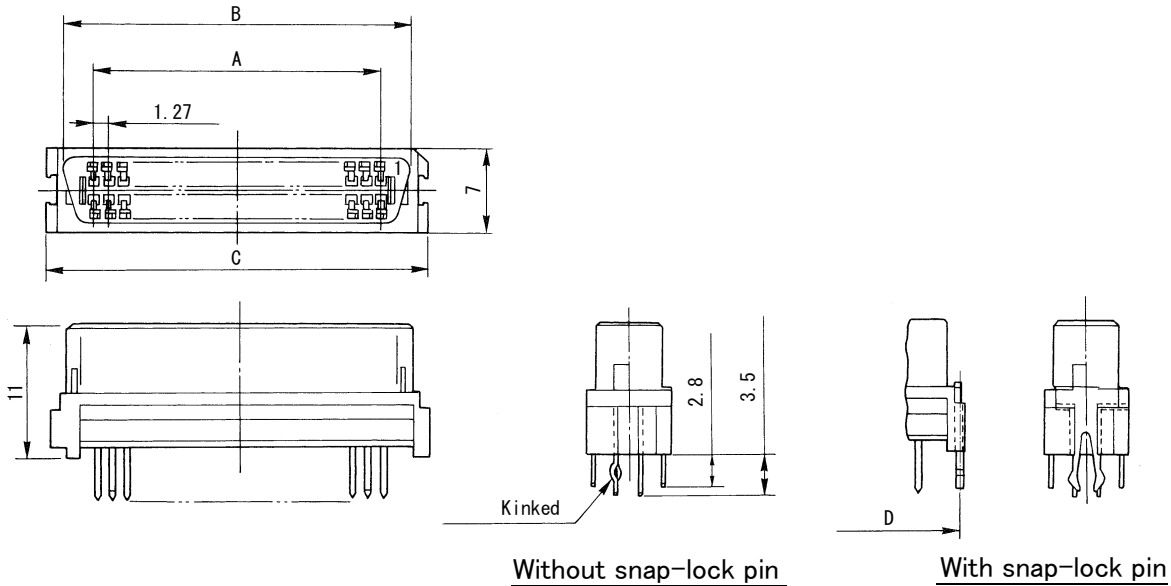
■ Straight Receptacles

DHB-RB50-R131N

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

**CONTACT PLATING**  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



**PCB mounting dimensions**  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.48	20.03	18.54
30	17.78	22.83	26.38	24.89
34	20.32	25.37	28.92	27.43
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
60	36.83	41.88	45.43	43.94
68	41.91	46.96	50.51	49.02
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34
120	74.93	79.98	83.53	82.04

## ■ Straight Receptacles (Pre-mating Contact)

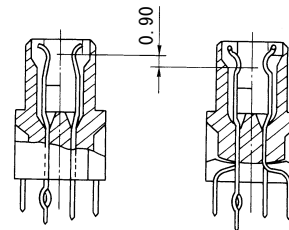
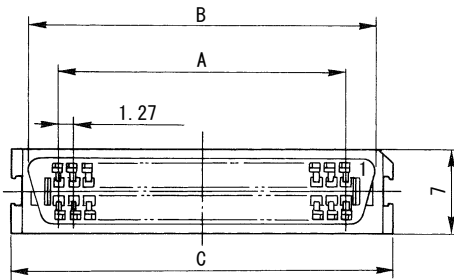
### DHB-RH50-R131N10

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 68, 80,  
100, 120

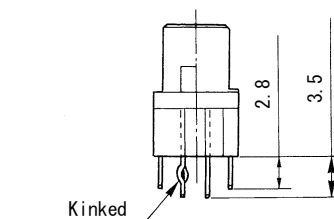
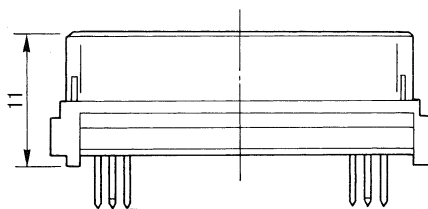
**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating

**PRE-MATING CONTACT**  
(see below)  
10: 4 contacts  
(each 2 contacts both end)  
11: 8 contacts  
(each 4 contacts both end)

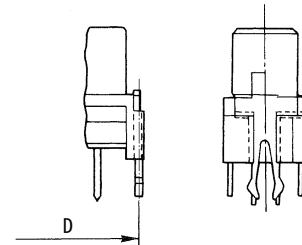
**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin



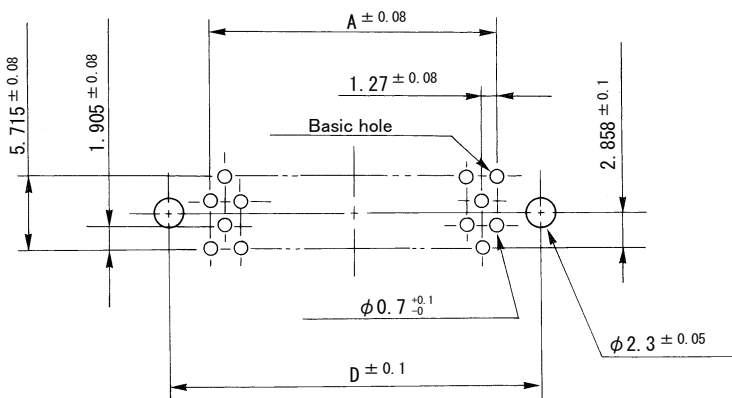
With pre-mating contacts      With standard contacts



Without snap-lock pin



With snap-lock pin

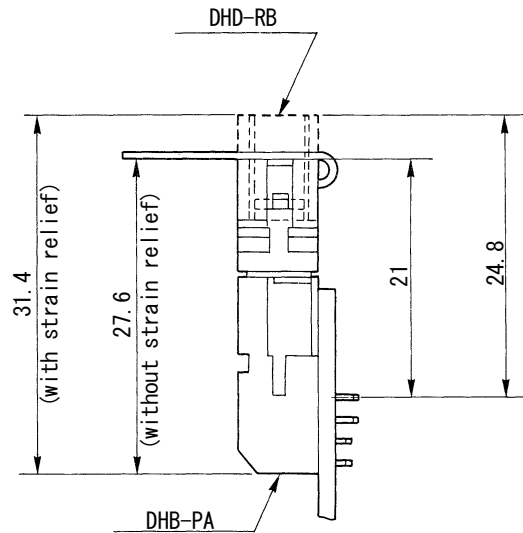
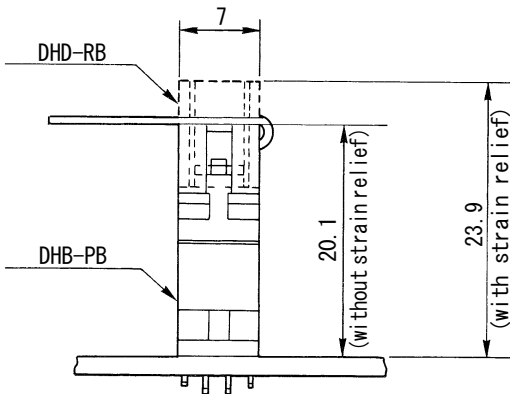
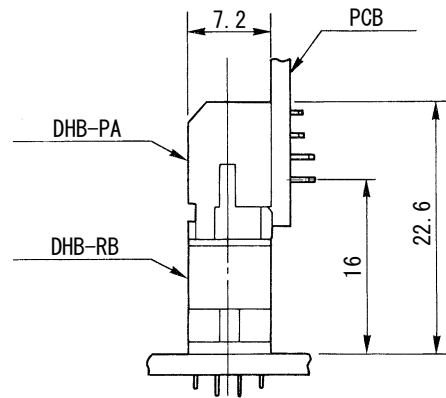
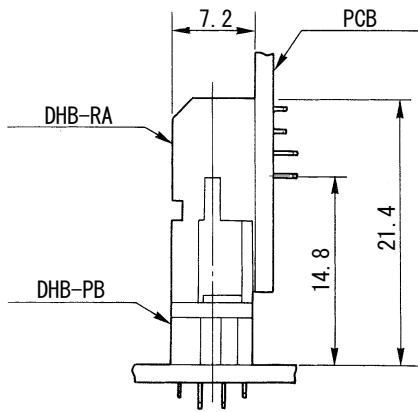
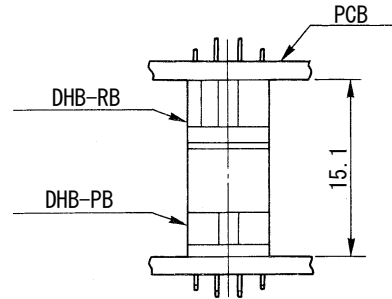
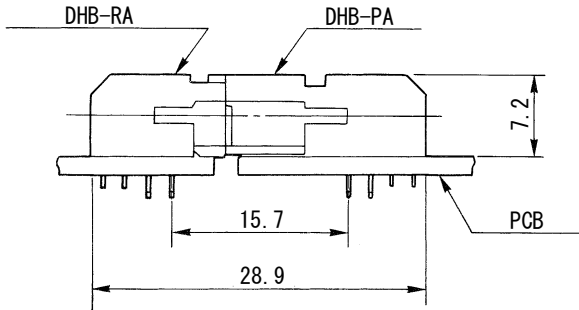


**PCB mounting dimensions**  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{±0.19}$  (without snap-lock pin)

NO. OF CONTACTS	A	B	C	D
20	11.43	16.48	20.03	18.54
30	17.78	22.83	26.38	24.89
34	20.32	25.37	28.92	27.43
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
60	36.83	41.88	45.43	43.94
68	41.91	46.96	50.51	49.02
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34
120	74.93	79.98	83.53	82.04

Mated Dimensions



K  
DHB

## Receptacles-Stacking Type

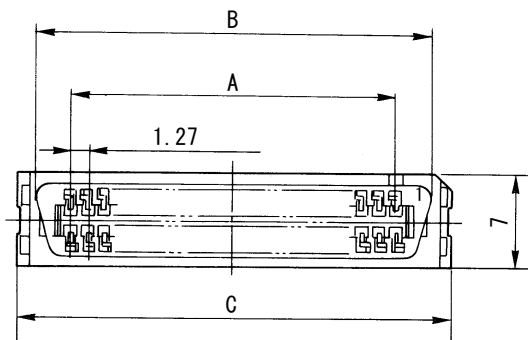
### DHB-RD50-S131N-4.9

**NO. OF CONTACTS**  
20, 30, 34, 40, 50, 60, 80, 100

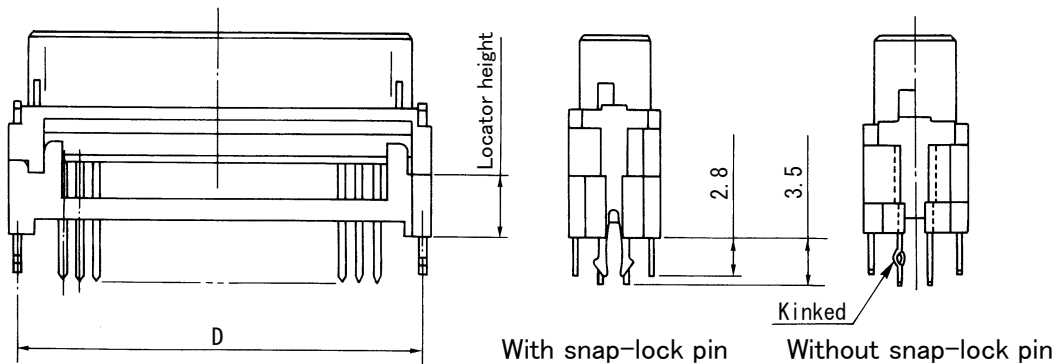
**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail... Solder plating

**LOCATOR HEIGHT**  
4.9: 4.9mm  
3.9: 3.9mm  
2.9: 2.9mm  
1.9: 1.9mm

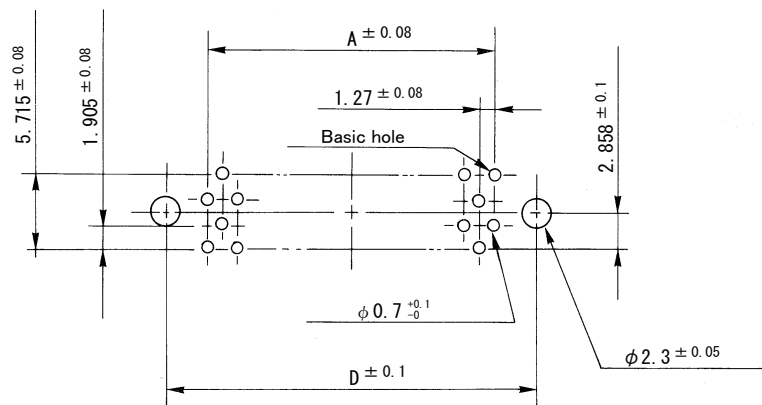
**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin



NO. OF CONTACTS	A	B	C	D
20	11.43	16.48	20.03	18.54
30	17.78	22.83	26.38	24.89
34	20.32	25.37	28.92	27.43
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
60	36.83	41.88	45.43	43.94
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34

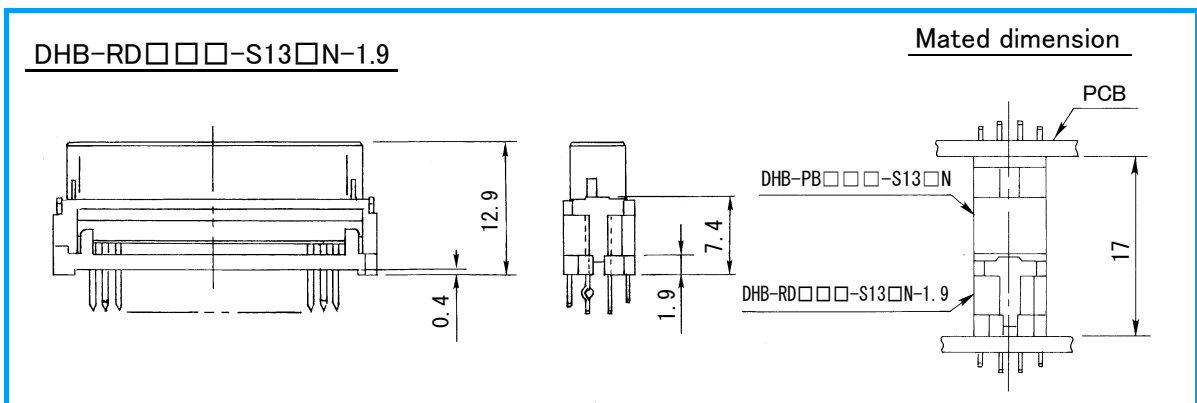
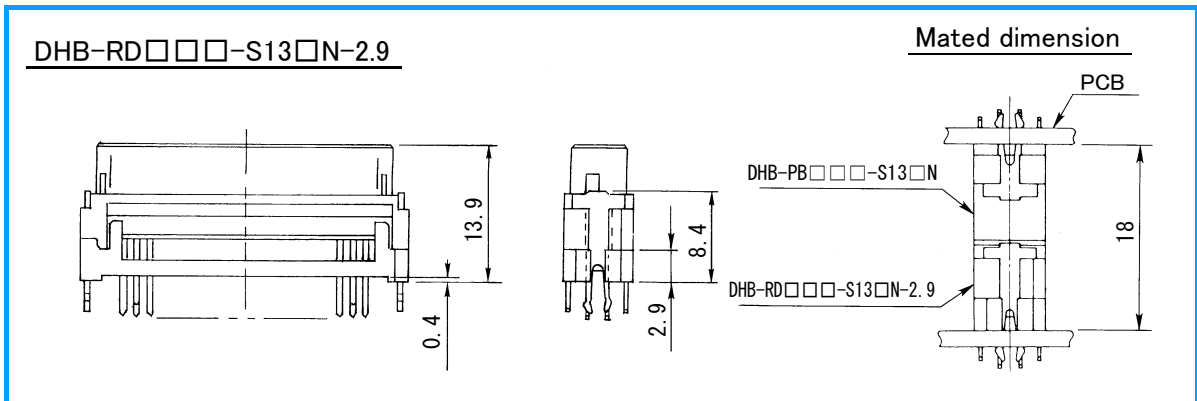
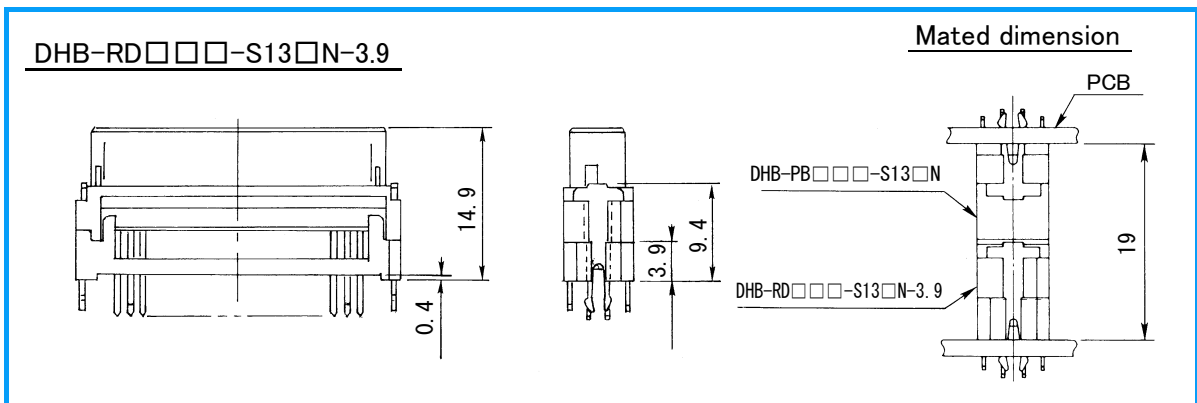
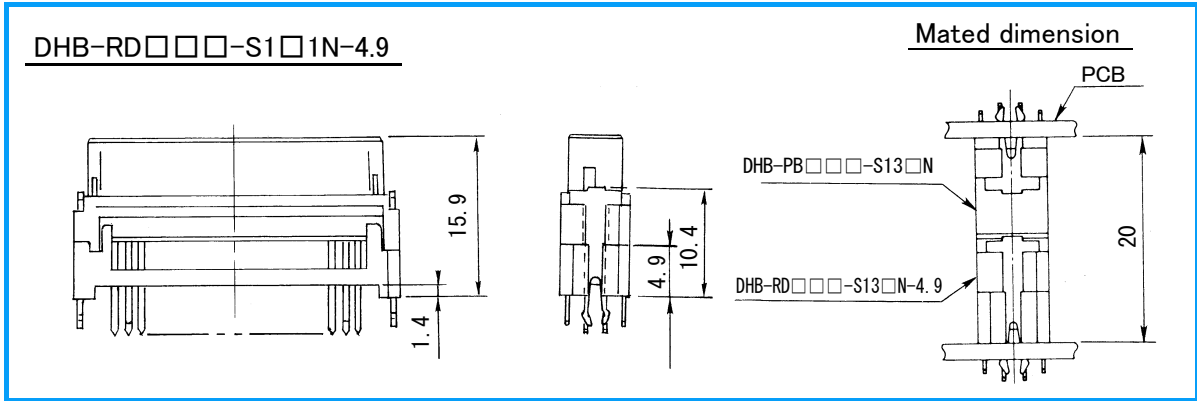


### PCB Mounting Dimension



PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6 \pm 0.19$  (without snap-lock pin)







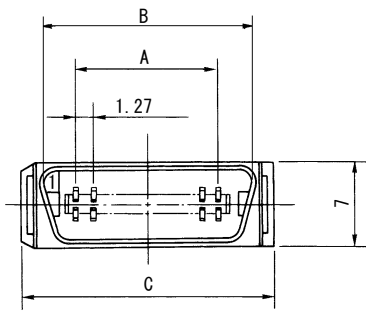
## Low Profile Plug

### DHB-PK50-S131N

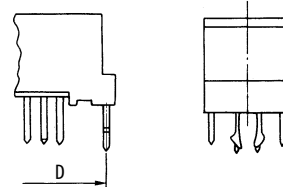
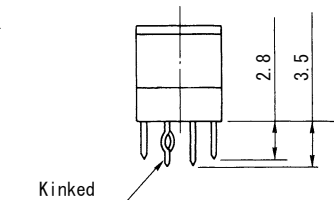
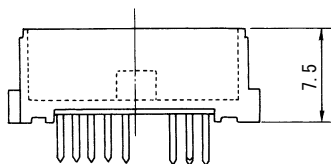
**NO. OF CONTACTS**  
30, 40, 50, 60, 80, 100

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail... Solder plating

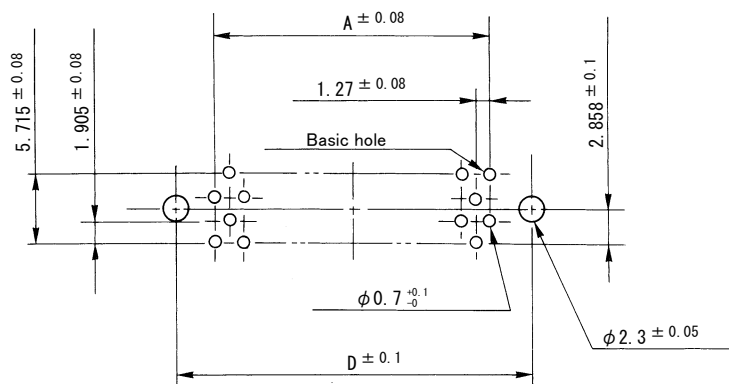


NO. OF CONTACTS	A	B	C	D
30	17.78	19.58	26.38	24.89
40	24.13	25.93	32.73	31.24
50	30.48	32.28	39.08	37.59
60	36.83	38.63	45.43	43.94
80	49.53	51.33	58.13	56.64
100	62.23	64.03	70.83	69.34



Without snap-lock pin

With snap-lock pin



PCB mounting dimensions  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)

$1.6^{±0.19}$  (without snap-lock pin)



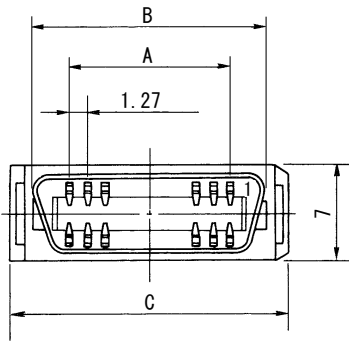
Low Profile Receptacle

DHB-RK50-S131N

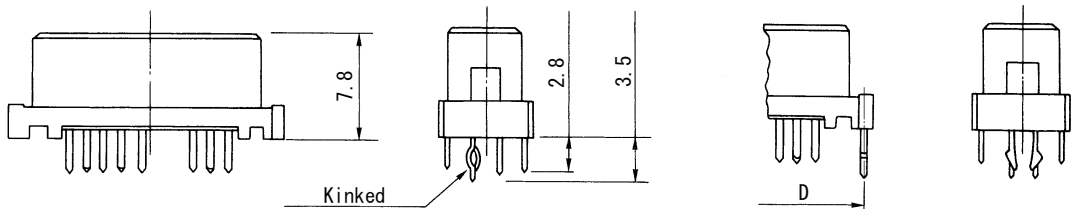
NO OF CONTACTS  
30, 40, 50, 80, 100

SNAP LOCK PIN  
N: Without snap-lock pin  
1: With snap-lock pin

CONTACT PLATING  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating

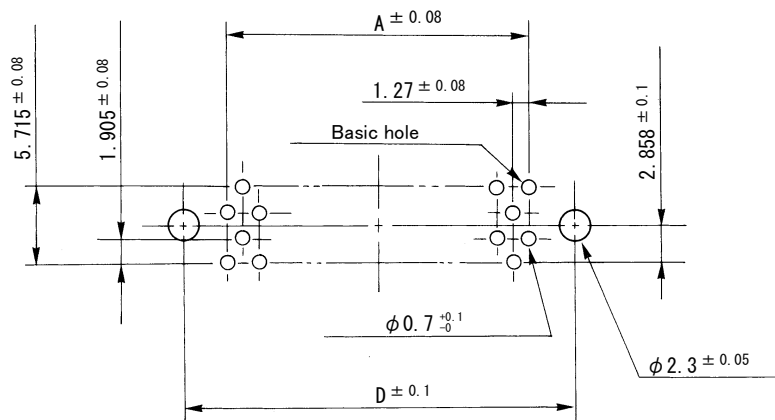


NO. OF CONTACTS	A	B	C	D
30	17.78	22.83	26.38	24.89
40	24.13	29.18	32.73	31.24
50	30.48	35.53	39.08	37.59
80	49.53	54.58	58.13	56.64
100	62.23	67.28	70.83	69.34



Without snap-lock pin

With snap-lock pin



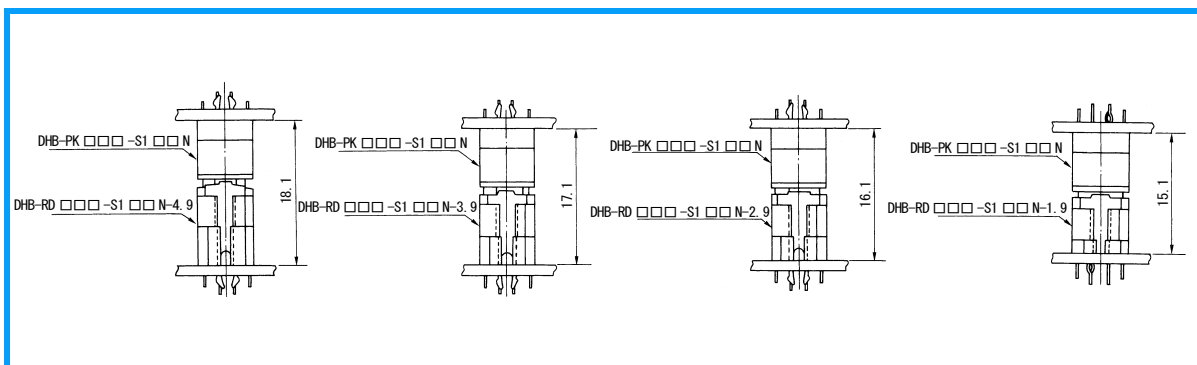
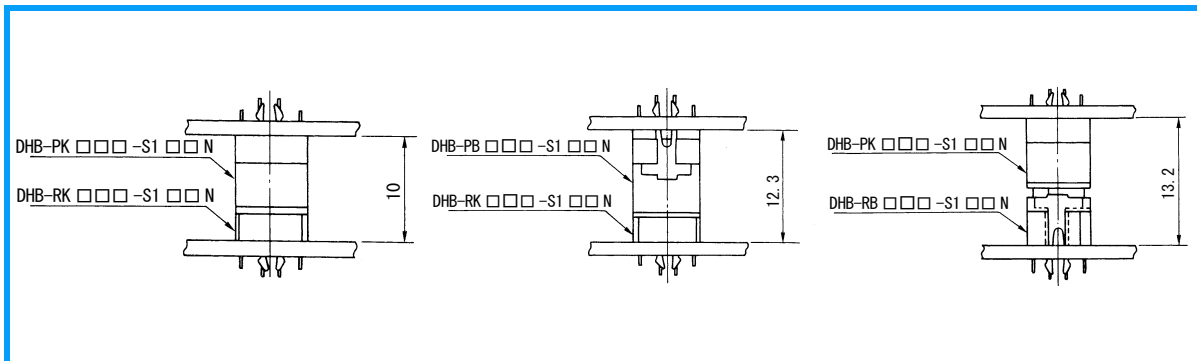
PCB mounting dimensions  
(Connector mount side)

PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)

$1.6^{±0.19}$  (without snap-lock pin)



Mated Dimensions



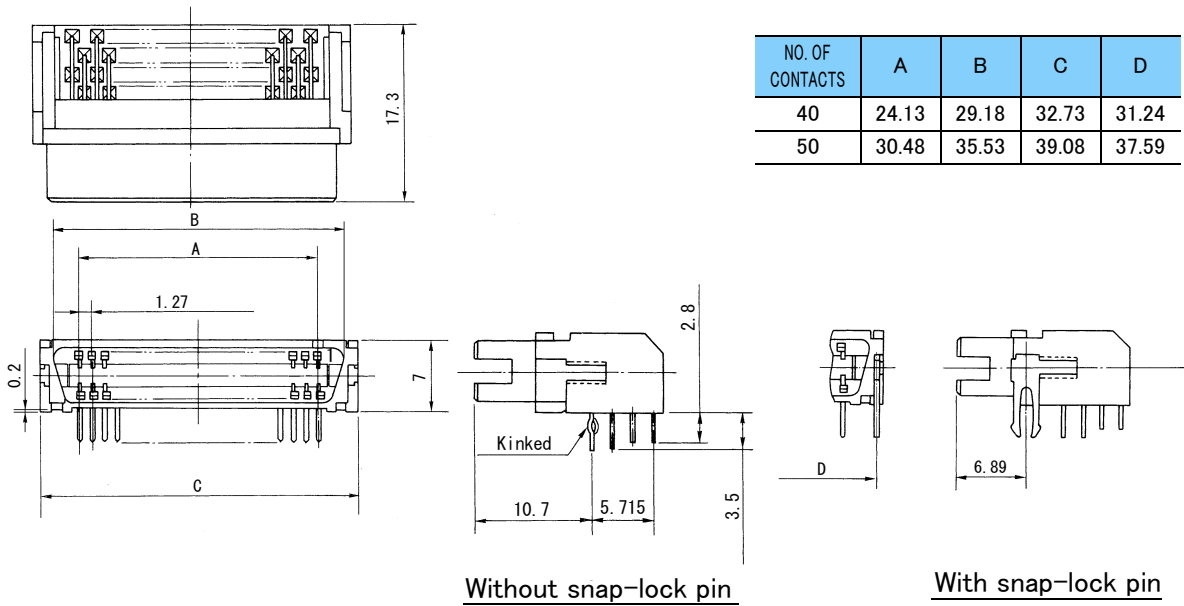
Right Angle Receptacles (With Slot Type)

DHB-RL50-R131N

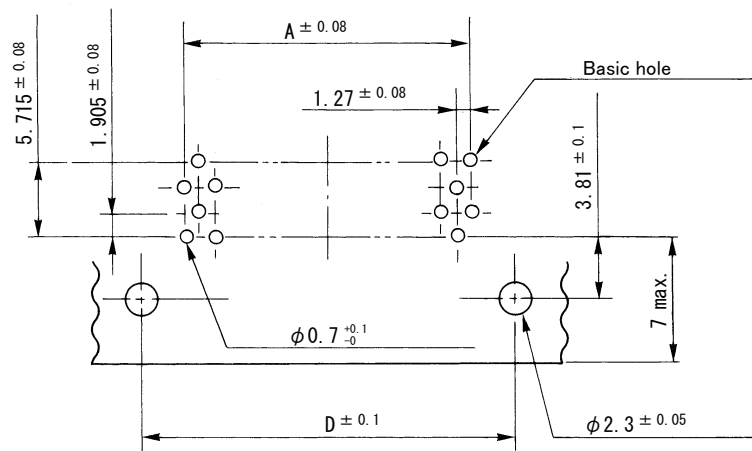
NO OF CONTACTS  
40, 50

SNAP LOCK PIN  
N: Without snap-lock pin  
1: With snap-lock pin

CONTACT PLATING  
1: 0.76 μm Gold over Nickel  
2: 0.25 μm Gold over Nickel  
3: Gold flash over Nickel  
Tail···Solder plating



K  
DHB



PCB mounting dimensions  
(Connector mount side)

PCB thickness: 1.6<sup>+0.19</sup><sub>-0.1</sub> (with snap-lock pin)  
1.6<sup>±0.19</sup> (without snap-lock pin)

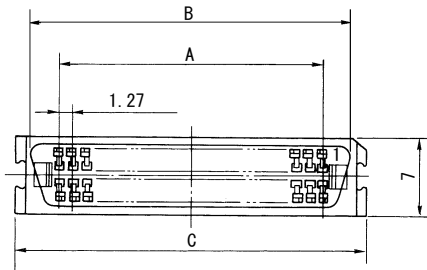
## Straight Receptacles (With Slot Type)

### DHB-RM80-R131N

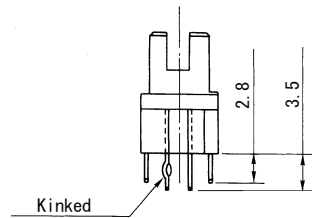
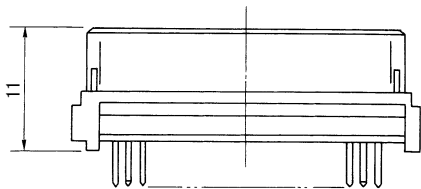
**NO OF CONTACTS**  
80, 120

**SNAP LOCK PIN**  
N: Without snap-lock pin  
1: With snap-lock pin

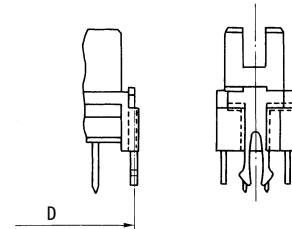
**CONTACT PLATING**  
1: 0.76  $\mu$ m Gold over Nickel  
2: 0.25  $\mu$ m Gold over Nickel  
3: Gold flash over Nickel  
Tail...Solder plating



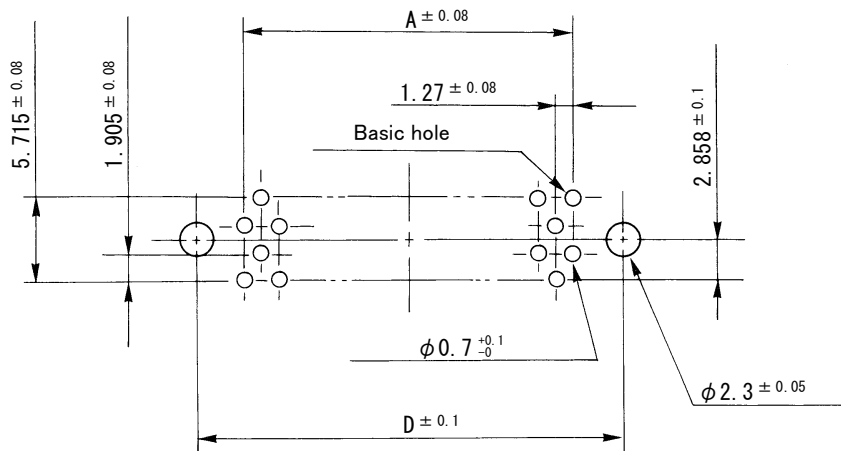
NO. OF CONTACTS	A	B	C	D
80	49.53	54.58	58.13	56.64
120	74.93	79.98	83.53	82.04



Without snap-lock pin



With snap-lock pin



**PCB mounting dimensions**  
(Connector mount side)

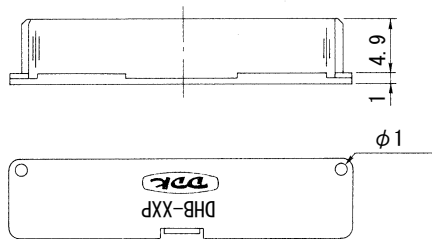
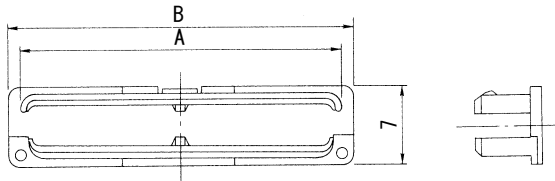
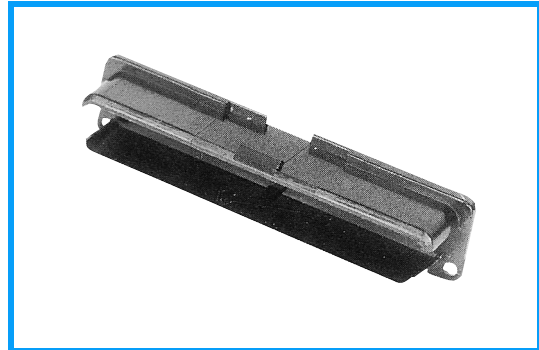
PCB thickness:  $1.6^{+0.19}_{-0.1}$  (with snap-lock pin)  
 $1.6^{\pm 0.19}$  (without snap-lock pin)



■ Dust Cover (For Plug)

DHB-40PB-404

NO. OF CONTACTS  
40, 68

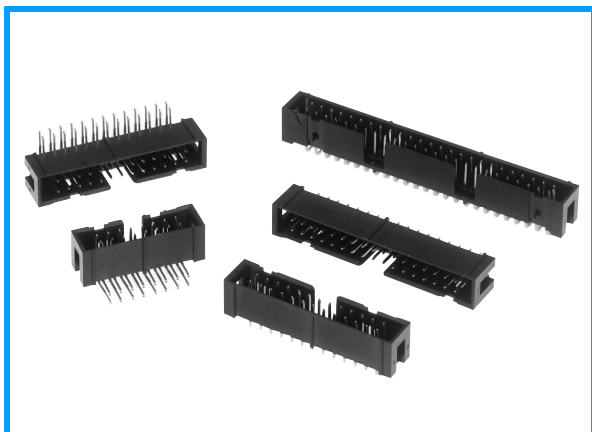


P/N	NO. OF CONTACTS	A	B
DHB-40PB-404	40	28.88	30.74
DHB-68PB-404	68	46.66	48.52

Applicable Connector : DHB-PA, DHB-PB, DHB-PG, DHB-PH Type

# HU5 Series

## Low Profile Header Connectors Intermateable with FRC5 Series



### FEATURE

- HU5 series is low profile pin header intermateable with FRC5 series (IDC for flat cables)
- Preventive mechanism of mis-mating

### SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	1A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	1000M $\Omega$ min. at 500V DC
Contact resistance	15M $\Omega$ max.
Operating temperature	-55°C to +105°C

### MATERIAL/FINISH

Block	PBT resin (UL94V-O)/Black
Contact	Copper alloy/Gold over Nickel plating

L  
HU5

## HU5-400PNA-R53TD20

**NO. OF CONTACTS**  
10, 16, 20, 26, 30, 34, 40, 50

**KEY SLOT**  
0 : 10 ..... No key  
16, 20, 26, 30, 34, 40 ··· 1 key  
50 ..... 2 keys  
Key pitch : 22.86mm  
1 : 50 ..... 1 key

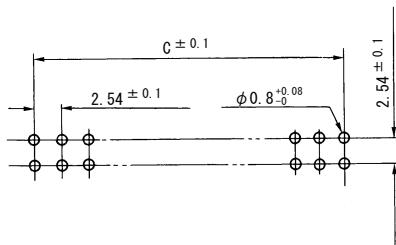
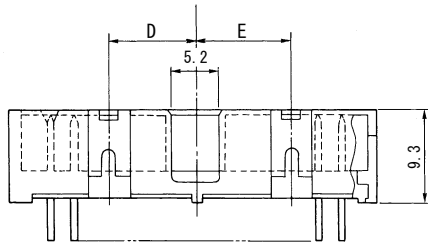
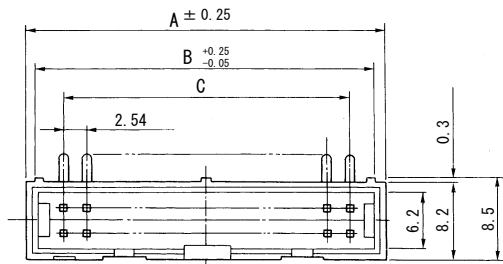
**CONTACT TAIL STYLE**  
R : Right angle  
S : Straight

**CONTACT TAIL LENGTH**  
5 : 2.9mm

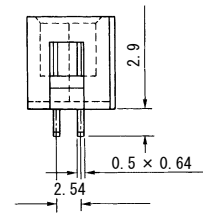
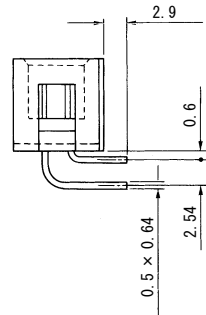
**DEVIATION**  
No designation : With only 1 surface gold plating on the mating area.  
D20 : With 4 surface gold plating on the mating area.

**CONTACT TAIL PLATING**  
T : Pb/Sn plating

**CONTACT PLATING**  
1 : 0.8  $\mu$  Gold over Nickel  
2 : 0.4  $\mu$  Gold over Nickel  
3 : Gold flash over Nickel  
5 : Pb/Sn (applicable to 40 contacts max.)



PCB mounting dimensions



Right angle contact tail

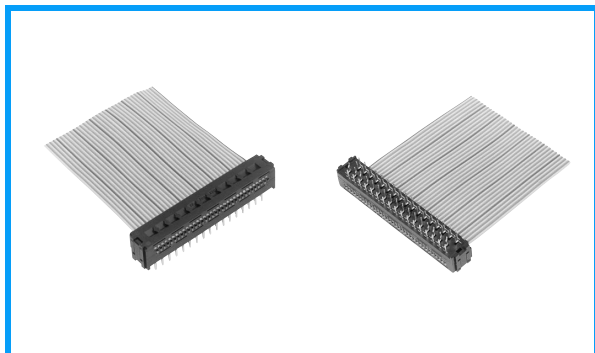
Straight contact tail

NO. OF CONTACTS	A	B	C	D	E
10	20.0	17.52	10.16	—	3.81
16	27.6	25.14	17.78	5.08	7.62
20	32.7	30.22	22.86	7.62	10.16
26	40.3	37.84	30.48	11.43	13.97
30	45.4	42.92	35.56	13.97	16.51
34	50.5	48.00	40.64	16.51	19.05
40	58.1	55.62	48.26	20.32	22.86
50	70.8	68.32	60.96	26.67	29.21



# DHE Series

## 1.27mm Centerline IDC Connectors for Direct Cable to PC Board Connections



- PBX, Computers, etc.

### FEATURE

- 1.27mm center IDC connectors for 0.635mm pitch flat ribbon cable (AWG#28 or 30)
- Bi-level IDC termination design for reliable connection
- Open-ended rear cover design for daisy chain applications

## SPECIFICATION

Voltage rating	250V AC (rms)
Current rating	0.5A/contact
Dielectric withstanding voltage	500V AC (rms) for 1 minute
Insulation resistance	500M $\Omega$ min. at 500V DC
Contact resistance	20m $\Omega$ max. at 10mA DC

## MATERIAL/FINISH

Contact	Copper alloy/Solder plating
Insulator	Polyamide (UL94V-0)/Black

## APPLICABLE CABLES

AWG#30 or #28 flat ribbon cables	
Insulator O.D.	0.6mm dia.
Construction	AWG#30: 7/0.102mm AWG#28: 7/0.127mm

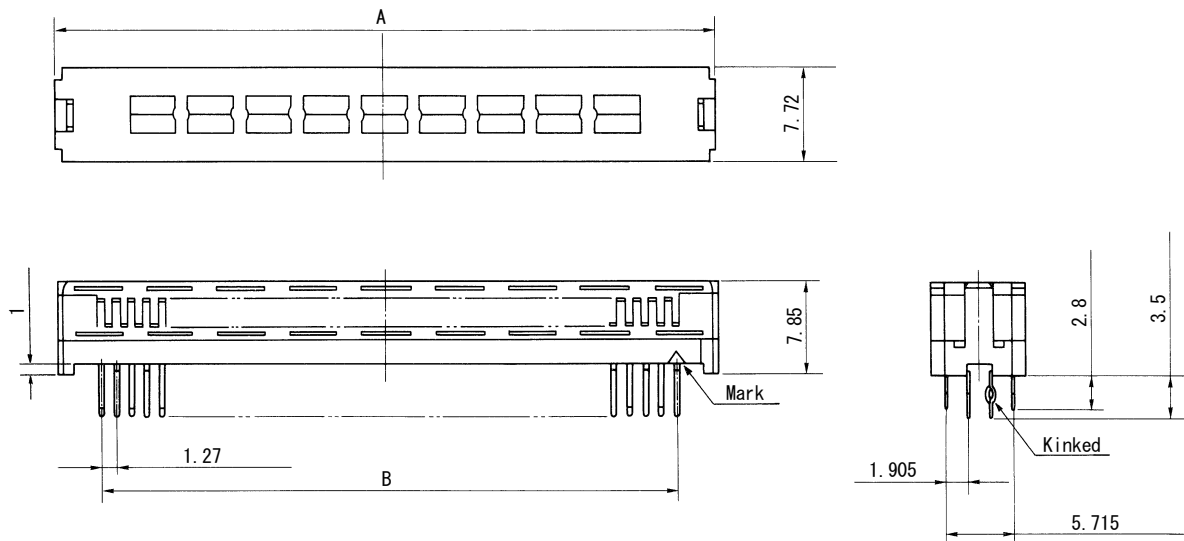
## DHE-J68-15AN

**NO. OF CONTACTS**  
26, 50, 60, 68

**TAIL LENGTH**  
1: 2.8mm & 3.5mm

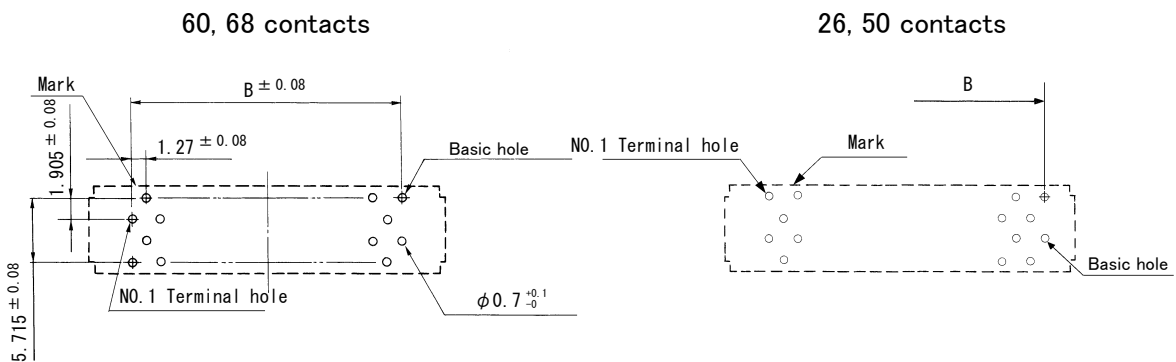
**TAIL STYLE**  
A: with Kinked style  
N: without Kinked style

**CONTACT PLATING**  
5: Solder plating



### PCB Mounting Dimensions

(Connector Mounting Side)



NO. OF CONTACTS	A	B
26	22.99	15.24
50	38.23	30.48
60	44.58	36.83
68	49.66	41.91

PCB mounting dimensions  
(connector mount side)  
PCB thickness=1.6±0.19

**Cable Assembly Tool**

P/N	Tool NAME
357J-11656-2	Cable cutting tool
357J-10852	Attachment for cover termination
357J-10854	Cover termination tool
357J-10855	Final termination tool
357J-10857	Attachment for cover termination
357J-11998-13	Attachment for center locator (26 Pos.)
357J-11998-5	Attachment for center locator (50 Pos.)
357J-11998-6	Attachment for center locator (60 Pos.)
357J-11998-7	Attachment for center locator (68 Pos.)