



2 Contact Row High Density Signal Connectors

- Offset-grid contacts layout, two contact rows within dielectric connector body, 1.905 mm center-to-center contact spacing in each row and 1.651 row-to-row spacing.
- 0.5 mm nominal pin DIA contact size; 57 contact positions; dip solder, SMT soldering or wired contact termination types.
- High contact density and durability, low profile and light weight. High shock and vibration proof (no micro interruptions test: 2ns).
- Conforms to MIL-DTL-55302.
- For military, test and burn-in systems for semiconductor industry.

Technical Characteristics

MATERIAL		
Body Contacts	PPS Brass CuBe Phosphor-Bronze	MIL-M-24519 ASTM B455 ASTM B197 ASTM B139
	Stanness steer	ASTIVI A382
FINISHES		
Contacts Hardware	Gold Passivation	ASTM B488 ASTM A967
MECHANICAL		
Mating/Unmating force Contact life	50g max 30.000 insertion	-
ELECTRICAL		
Current rating ⁽¹⁾ Contact resistance Dielectric withstanding voltage Insulation resistance	2.0 A ≤ 5.0 mΩ 1000 VRMS, 60 Hz a.s.I. ≥ 5000 MΩ at 500 VDC	
PHYSICAL AND ENVIROMENTAL		
Shock Vibration Operating range	- - -65°C +125°C	In accordance with MIL-STD-1344 In accordance with MIL-STD-1344 -

⁽¹⁾ Consult factory for details



Ordering Information

	C153	57	*	*	*	*	*	*	*
Connector family									
Connector size									
Connector and contacts style									
Plug (socket contacts equipped) P Receptacle (pin contacts equipped) P									
Contact terminal style									
Socket Crimp (AWG26) W Socket SMT soldering S									
Socket straight L=2.65 D S									
Hardware code									
D-shaped (Pin for Plug) D-shaped (Insert for Receptacle) Y									
Omnipolarized guide ⁽¹⁾ P Screw locking for Plug type D K									
Insert screw locking for Plug type S K K K									
Hardware polarization									
D-shaped quide 01÷16									
D-shaped guide in pos. 1 whitout Loctite 00 Omnipolarized guide 17									
Guide (type P or Y) shipped loose18K, X Screw locking19									
Contact finishing									
Plating conforming to MIL-DTL-55302 ⁽⁴⁾ H Plating conforming to MIL-DTL-55302 + tin dipping HS									

⁽¹⁾ Receptacle body using thru hole
⁽²⁾ This finishing is only for socket contacts crimp terminal style



Plug connector socket contact equipped, crimp termination style, lead attached



Umbilical connector for measuring and test equipments 57 socket contact positions,1.905 mm x 1.651 mm, offset grid, crimp contact terminal style, lead attached.



Plug connector socket contacts equipped surface mount tail termination style (SMT soldering)



Card edge connector for measuring and test devices, (i.e. extender board applications), 57 socket contact position, 1.905 mm x 1.651 mm, offset grid, surface mount tail termination style (SMT soldering).





Plug connector socket contact equipped, dip solder contact termination style





Mounting pattern, motherboard application (recommended PCB hole configuration)



Receptacle connector pin contacts equipped, surface mount tail termination style (SMT soldering)



Card edge test connector, (added and wired on the PCB), 57 pin contact position, 1.905 mm x 1.651 mm, offset grid, surface mount tail termination style (SMT soldering).



Mounting pattern, daughterboard application, or in line arrangement board-to-board connection.



Hardware code



- TYPE Y - SPANNER WRENCH: ref. ord. 14613- 2
 - POLARIZED MALE GUIDE: pos. 00: without loctite pos. 01+16: with loctite 242 (blue)



TYPE P - OMNIPOLARIZED MALE GUIDE PIN: pos. 17: with loctite 242 (blue)

Hardware code for plug connector socket contacts equipped, crimp terminal style



TYPE Y - SPANNER WRENCH: ref. ord. 14613- 2

- POLARIZED MALE GUIDE:
- pos. 00: without loctite pos. 01÷16: with loctite 242 (blue) - SCREW 1.6M: without loctite



TYPE P

- OMNIPOLARIZED MALE GUIDE PIN: pos. 17: with loctite 242 (blue) - SCREW 1.6M: without loctite



TYPE X

SCREW LOCK

Hardware code for plug connector socket contacts equipped, surface mount tail terminal style



TYPE Y - SPANNER WRENCH: ref. ord. 14613- 2 - POLARIZED MALE GUIDE: pos. 00: without loctite pos. 01+16: with loctite 242 (bleu) - SCREW 1.6M: without loctite



TYPE P

- OMNIPOLARIZED MALE GUIDE PIN: pos. 17: with loctite 242 (blue) - SCREW 1.6M: without loctite



TYPE K - SCREW LOCK SPANNER WRENCH: rif. ord. 19003

Hardware code for plug connector socket contacts equipped, dip solder terminal style



TYPE Y - POLARIZED FEMALE GUIDE INSERT:



pos. 01+16: D- shaped female guide insert



TYPE P - OMNIPOLARIZED FEMALE GUIDE: pos. 17: round thru hole without D-shaped female guide insert

Hardware code for receptacle connector pin contacts equipped, surface mount tail terminal style

C153 Series





Maximum dimensions of mated connectors: plug connector crimp terminals equipped, lead attached and receptacle connector, surface mount tail terminals equipped (SMT soldering).



Maximum dimensions of mated connectors: plug and receptacle connectors surface mount tail terminals equipped (SMT soldering).



Maximum dimensions of mated connectors: plug connector, surface mount tail terminals equipped, and receptacle connector dip solder terminals equipped.





The connector halves mating



 $\underline{1}/$ see footnote at end of this page.

Maximum permissible inclination, in longitudinal and in trasversal axis, between the plug connector and the receptacle connector, in order to ensure the acceptable electrical engagement made by all contacts.



1/ see footnote at end of this page.

Maximum permissible displacement, between the plug connector and the receptacle connector, in order to ensure suitable fully insertion of the connector halves.



1/ see footnote at end of this page.

Maximum permissible separation distance, between the plug connector and the receptacle connector, in order to ensure the acceptable eletrical engagement made by all contacts.

1/ Value of these measures is applicable to plug connector equipped with crimp contact terminal style (lead attached) or equipped with surface mount tail contact terminal style (SMT soldering)