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Part Number: [0442820001](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, Shielded, SMT, 8/8

Documents:

[3D Model](#) [Product Specification PS-43743-0001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E107635

General

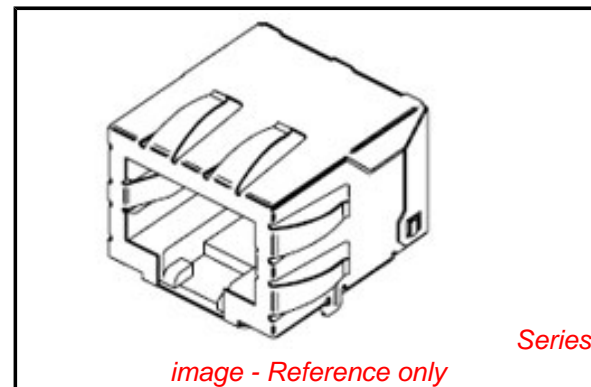
Product Family Modular Jacks/Plugs
 Series [44282](#)
 Component Type PCB Jack
 Magnetic No
 Overview [modular_plugs_jacks](#)
 Performance Category 3
 Power over Ethernet (PoE) N/A
 Product Name RJ45

Physical

Color - Resin Black
 Durability (mating cycles max) 500
 Flammability 94V-0
 Inverted / Top Latch No
 Lightpipes/LEDs None
 Material - Metal Brass, Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Orientation Right Angle (Side Entry)
 PCB Locator Yes
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Embossed Tape on Reel
 Panel Mount N/A
 Plating min: Mating (µin) 50
 Plating min: Mating (µm) 1.25
 Plating min: Termination (µin) 100
 Plating min: Termination (µm) 2.5
 Ports 1
 Positions / Loaded Contacts 8/8
 Surface Mount Compatible (SMC) N/A
 Temperature Range - Operating -40°C to +80°C
 Termination Interface: Style Surface Mount
 Wire/Cable Type N/A

Electrical

Current - Maximum per Contact 1.5A
 Grounding to Panel Yes
 Shielded Yes
 Voltage - Maximum 125V



EU RoHS

**ELV and RoHS
 Compliant**
**REACH SVHC
 Contains SVHC: No**
**Halogen-Free
 Status**

China RoHS



**Need more information on product
 environmental compliance?**

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of
 Compliance, [click here](#)

Please visit the [Contact Us](#) section for any
 non-product compliance questions.

Search Parts in this Series

[44282Series](#)

Mates With

FCC 68 Plugs

Solder Process Data

Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235

Material Info**Reference - Drawing Numbers**

Packaging Specification	PK-70873-700*
Product Specification	PS-43743-0001
Sales Drawing	SD-44282-001

This document was generated on 06/08/2010

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NOTES:

1) MATERIAL:

HOUSING & INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
 TERMINALS: PHOSPHOR BRONZE, .012/(0.30) THICK
 SHIELD: BRASS

2) FINISH:

TERMINALS:

- A = SELECT GOLD IN CONTACT AREA: .000050/(0.00127) MIN.,
 *SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
 WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.
- B = SELECT GOLD IN CONTACT AREA: .000030/(0.00076) MIN.,
 *SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
 WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.
- C = SELECT GOLD IN CONTACT AREA: .000015/(0.00038) MIN.,
 *SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MIN.,
 WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.

SHIELD:

- *100 MICRONS NICKEL OVER 50 MICRONS COPPER UNDERPLATE
- PCB GROUND TABS DIPPED IN TIN
- *THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD IN THE PC TAILS AND/OR SHIELD.

3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43743-0001.

4) PACKAGING SPECIFICATION:

CONNECTOR ASSEMBLIES TO BE PACKAGED USING TAPE & REEL SYSTEM PER PACKAGING DRAWING PK-70873-7006.

5) COPLANARITY SPECIFICATION:

WHEN AN ASSEMBLY IS PLACED UPON A LEVEL SURFACE, THE MAXIMUM GAP BETWEEN THE LEVEL SURFACE AND ALL TERMINAL TAILS AND FRONT SOLDER TAB IS .006/(0.15).

6) THRU HOLES .094±.002/(2.39±0.05) ARE FOR SHIELDS WITH LOCATION TABS ONLY.

7) AVAILABLE WITH (4) OPTIONAL SIDE GROUND TABS (OMITTED FOR SIDE TO SIDE STACKABILITY).

8) AVAILABLE WITH (2) OPTIONAL LOCATION TABS FOR LOCATING COMPONENT TO PCB AND/OR GROUNDING TO PCB.

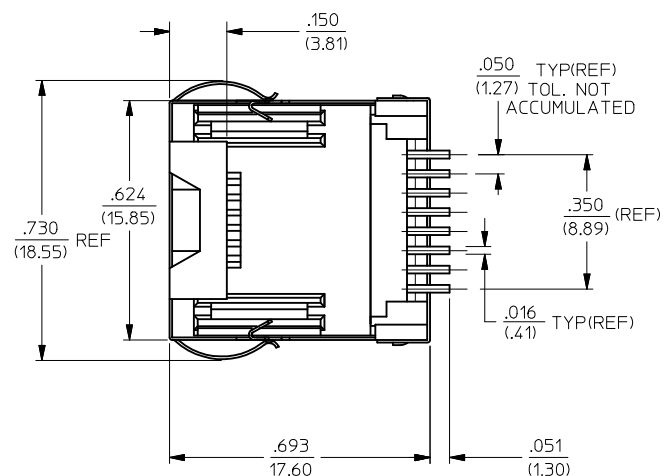
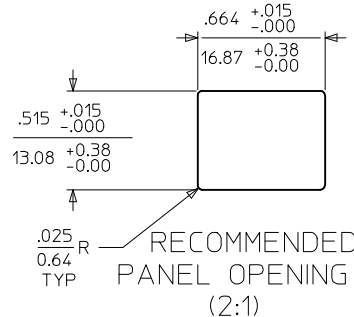
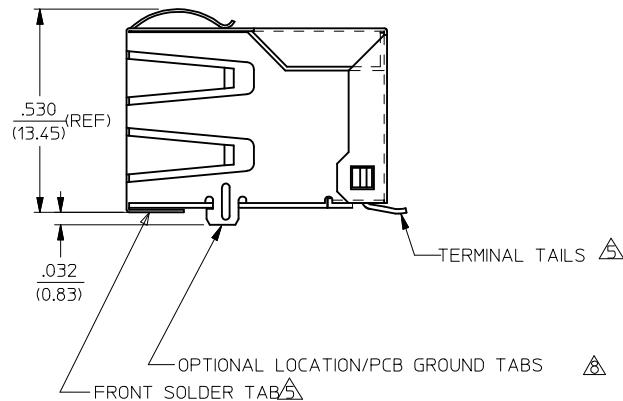
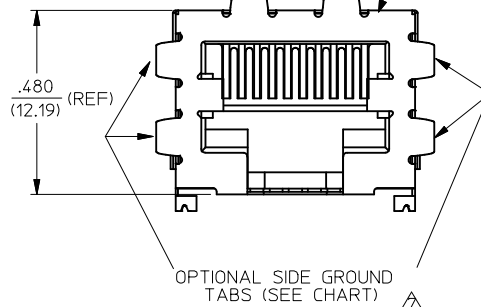
9) FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT.

10) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.

11) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

OPTIONAL TOP GROUND TABS (SEE CHART)

SHIELDED SMT MODJACK ASSEMBLY



44282-1004	A	NO	NO	YES	NONE
44282-0012	C	NO	YES	NO	NONE
44282-0011	B	NO	YES	NO	NONE
44282-0010	A	NO	YES	NO	NONE
44282-0009	C	YES	YES	NO	NONE
44282-0008	B	YES	YES	NO	NONE
44282-0007	A	YES	YES	NO	NONE
44282-0006	C	NO	YES	YES	NONE
44282-0005	B	NO	YES	YES	NONE
44282-0004	A	NO	YES	YES	NONE
44282-0003	C	YES	YES	YES	NONE
44282-0002	B	YES	YES	YES	NONE
44282-0001	A	YES	YES	YES	NONE

44282-0001, 44282-0002 & 44282-0003 SHOWN

ASSEMBLY MAT. NO.	TERMINAL PLATING	SHIELD SIDE TABS	SHIELD TOP TABS	LOCATION TABS	VOIDED CIRCUITS
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REVISED NOTES
 EC NO: UCP2009-1244
 DRWN:JKLOSTEMEIER 2008/12/10
 CHKD:JBELL 2008/12/10
 APPR:FSMITH 2008/12/10

DESCRIPTION

QUALITY SYMBOLS
 ▽=0
 ▽=0

D3

GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES ±	---
3 PLACES ±	---
2 PLACES ±	0.25
1 PLACE ±	---
ANGULAR ±1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
IN/MM	
DRAWN BY	DATE
STAMBAUG	99/06/03
CHECKED BY	DATE
WIRKUS	99/06/03
APPROVED BY	DATE
EDGLEY	99/06/03
MATERIAL NO.	
SEE CHART	
SIZE C	

SCALE 1:1

DESIGN UNITS INCH

THIRD ANGLE PROJECTION

TITLE
 SINGLE PORT, SHIELDED
 SIZE 8, 8 CIRCUIT
 SMT MODJACK

molex MOLEX INCORPORATED

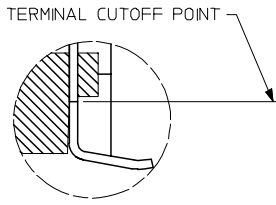
DOCUMENT NO. SD-44282-001

SHEET NO. 1 OF 2

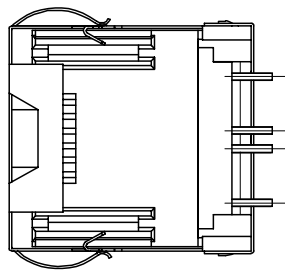
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13 12 11 10 9 8 7 6 5 4 3 2 1

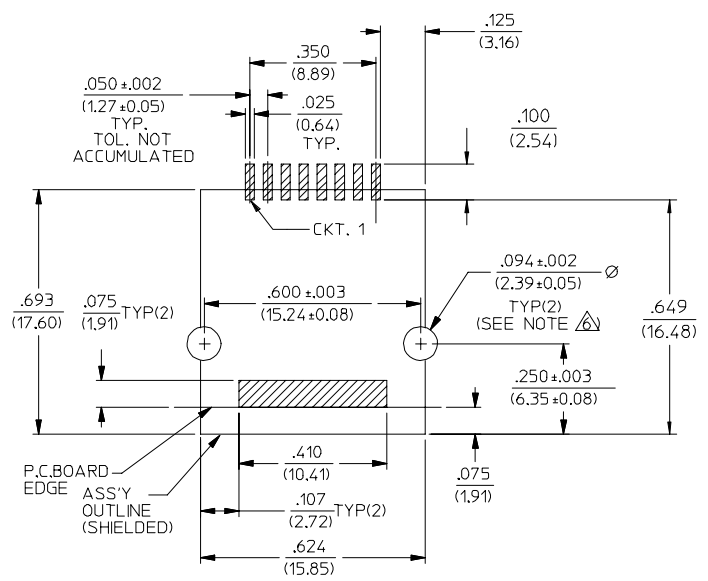
J
I
H
G
F
E
D
C
B
A



VIEW SHOWING TYPICAL TERMINAL CUTOFF OF TAIL (SEE NOTE 10) FOR VOIDED CIRCUITS.



TYPICAL VIEW SHOWING VOIDED CIRCUIT (CIRCUITS 2,3,6 & 7 SHOWN VOIDED)



PC BOARD LAYOUT FOR 8 POSITION HOUSING
(COMPONENT SIDE OF BOARD)

NOTES:
1. RECOMMENDED MINIMUM PCB THICKNESS: .034/0.86

SEE SHEET ONE FC NO: UCP2008-0143 DRAWN: JBELL 2007/07/24 CHKD: LSHMI DT 2007/07/30 APPR: FSM TH 2007/08/01 D2	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY STAMBAUG	DATE 99/06/03	TITLE SURFACE MOUNT MODULAR JACK W/ SHIELD					
		3 PLACES ± --- ± .010		CHECKED BY WIRKUS	DATE 99/06/03	MOLEX INCORPORATED					
		2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°		APPROVED BY EDGLEY	DATE 99/06/03	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-44282-001	SHEET NO. 2 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

12 11 10 9 8 7 6 5 4 3 2 1