

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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

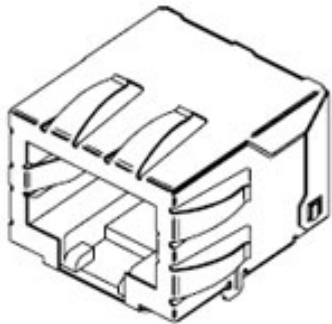


image - Reference only

Series

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 MICROINCHES NICKEL OVER 50 MICROINCHES 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.

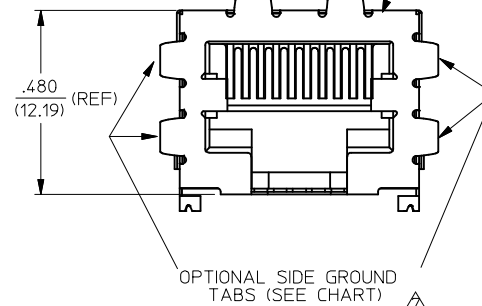
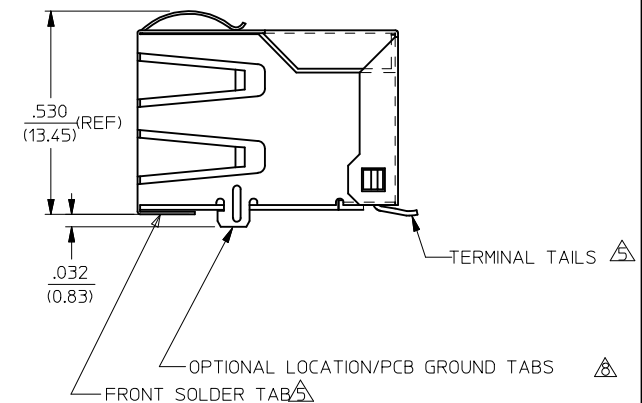
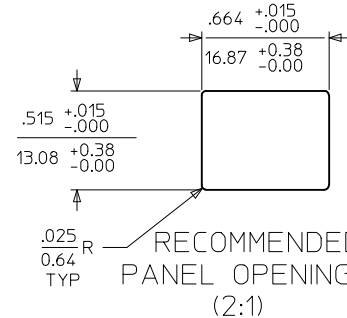
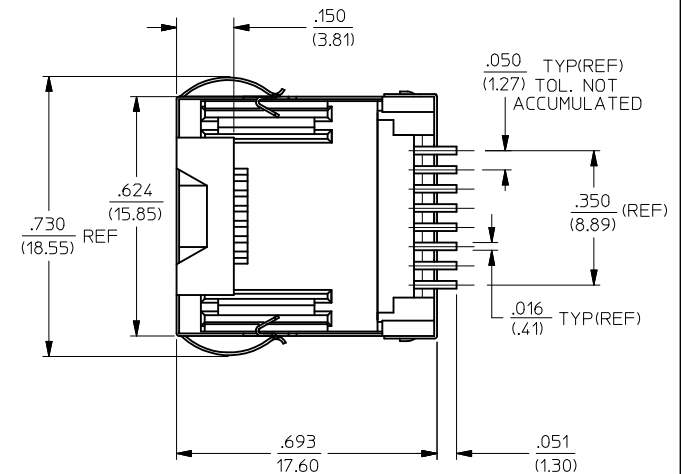
9) FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT
AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT.

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

REVISED NOTES EC NO: UCP2009-1244 DRWN:JKLOSTNER 2008/12/10 CHKD:JBELL 2008/12/10 APPR:FSMITH 2008/12/10	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	
				mm	INCH	DRAWN BY STAMBAUG	DATE 99/06/03	TITLE SINGLE PORT, SHIELDED SIZE 8, 8 CIRCUIT SMT MODJACK		
			4 PLACES	± ---	± ---	CHECKED BY WIRKUS	DATE 99/06/03			
			3 PLACES	± ---	± .010	APPROVED BY EDGLEY	DATE 99/06/03			
			2 PLACES	± 0.25	± ---	MATERIAL NO. SEE CHART				
1 PLACE	± ---	± ---	ANGULAR ±1/2°		DOCUMENT NO. SD-44282-001		SHEET NO. 1 OF 2			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MOLEX INCORPORATED					
REV	REV				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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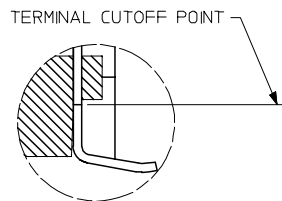
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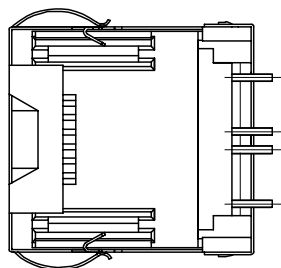
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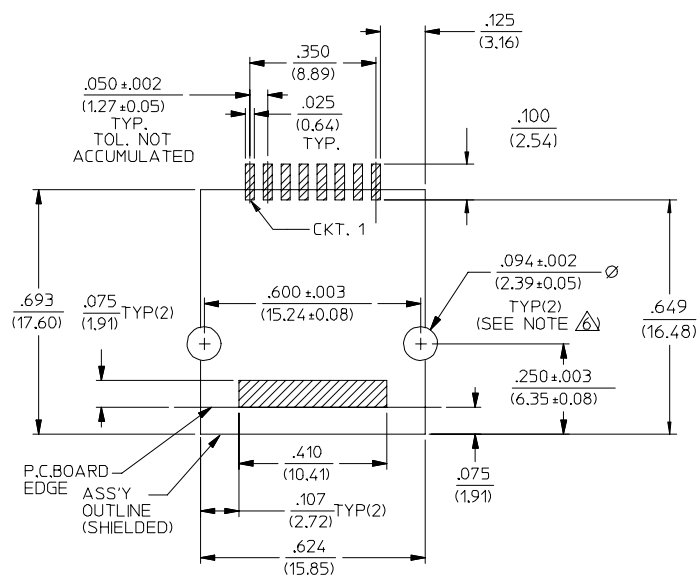
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VIEW SHOWING TYPICAL TERMINAL
CUTOFF OF TAIL (SEE NOTE 10) FOR VOIDED CIRCUITS.



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

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