

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0442821004](#)  
**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**

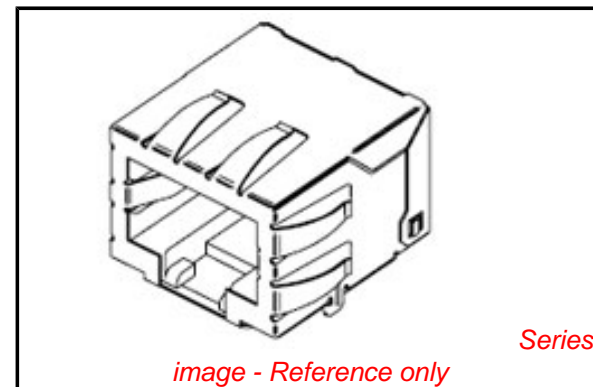
CSA LR19980  
 UL E107635

**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**

Boot Color N/A  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Inverted / Top Latch No  
 Keying to Mating Part None  
 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) 0.034 In  
 PCB Thickness Recommended (mm) 0.86 mm  
 Packaging Type Embossed Tape on Reel  
 Panel Mount Without Flange  
 Pitch - Mating Interface (in) 0.040 In  
 Pitch - Mating Interface (mm) 1.02 mm  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 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) No  
 Temperature Range - Operating -40°C to +70°C  
 Termination Interface: Style Surface Mount  
 Waterproof / Dustproof No



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
 Status**  
**Not Reviewed**

**China RoHS**



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

Email [productcompliance@molex.com](mailto: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

Wire/Cable Type	N/A
<b>Electrical</b>	
Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Grounding to Panel	None
Shielded	Yes
Voltage - Maximum	150V AC (RMS)

**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.

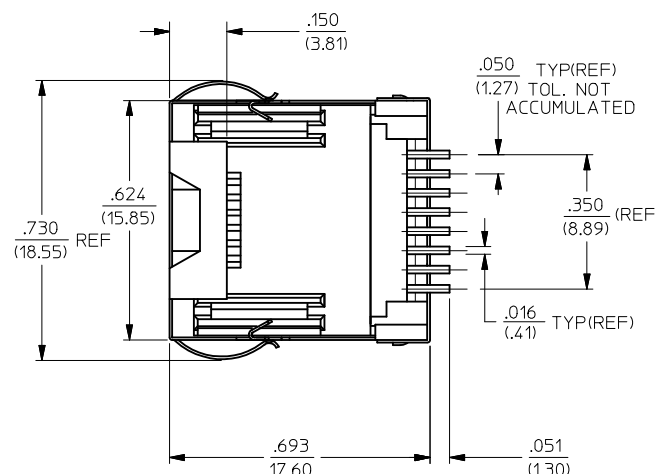
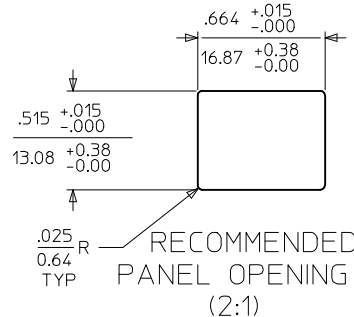
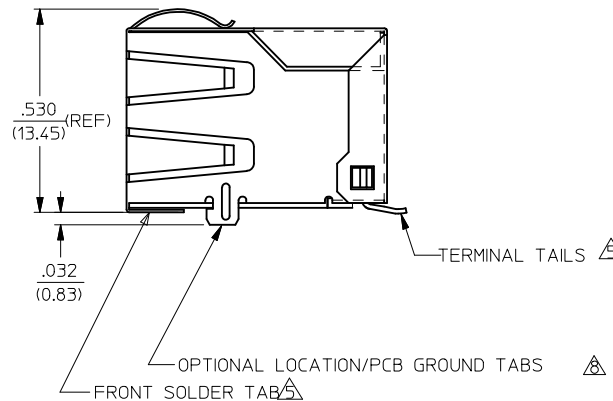
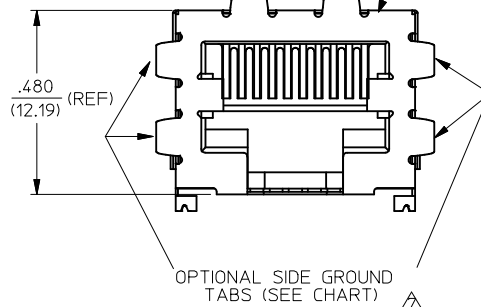
9) FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT.

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

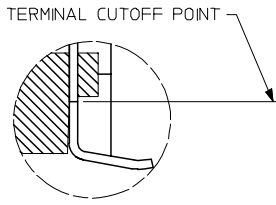
ASSEMBLY MAT. NO.	TERMINAL PLATING	SHIELD SIDE TABS	SHIELD TOP TABS	LOCATION TABS	VOIDED CIRCUITS
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REVISED NOTES EC NO: UCP2009-1244 DRWN:KLOSTEMEIER 2008/12/10 CHKD:JBELL 2008/12/10 APPR:FSMITH 2008/12/10	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	IN/MM	1:1	INCH	
	DRAWN BY: STAMBAUG CHECKED BY: WIRKUS APPROVED BY: EDGLEY	DATE: 99/06/03 DATE: 99/06/03 DATE: 99/06/03	TITLE: SINGLE PORT, SHIELDED SIZE 8, 8 CIRCUIT SMT MODJACK			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHART SIZE C	DOCUMENT NO. SD-44282-001 SHEET NO. 1 OF 2	MOLEX INCORPORATED		

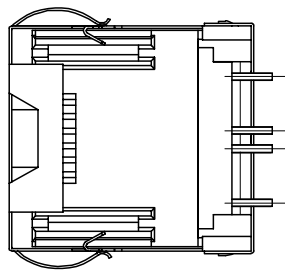
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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

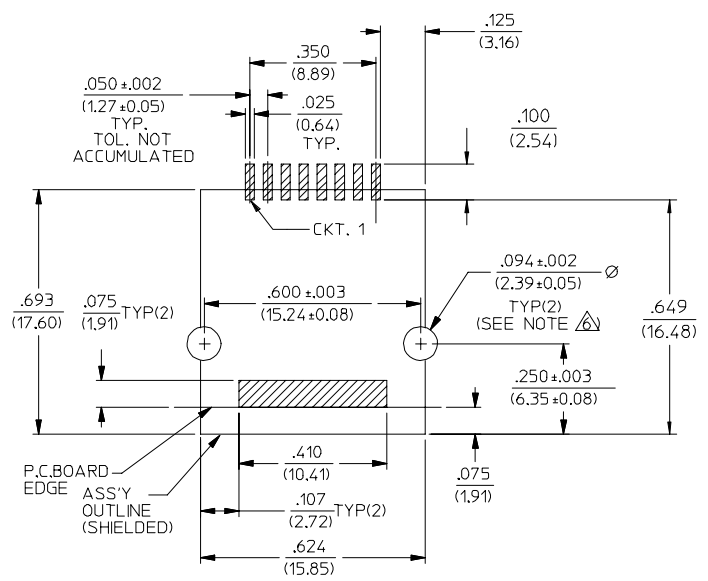
J  
I  
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G  
F  
E  
D  
C  
B  
A



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

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