

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

**Part Number:** [0442820010](#)  
**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

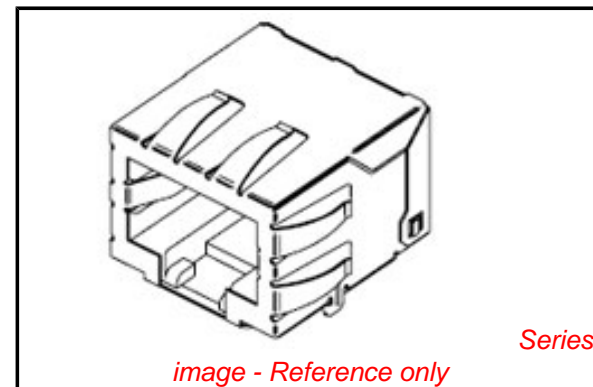
**Physical**

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 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 None  
 Shielded Yes  
 Voltage - Maximum 125V

**Solder Process Data**



**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

Lead-free Process Capability  
Process Temperature max. C

Reflow Capable (SMT only)  
235

### **Material Info**

### **Reference - Drawing Numbers**

Packaging Specification  
Product Specification  
Sales Drawing

PK-70873-700\*  
PS-43743-0001  
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.

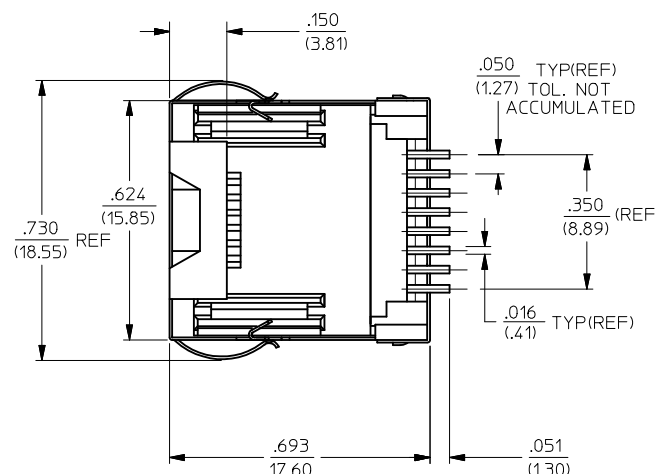
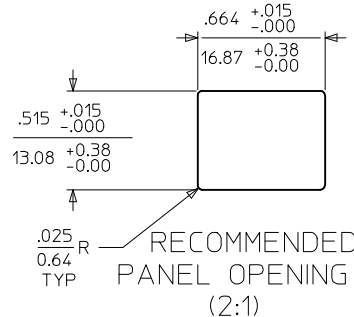
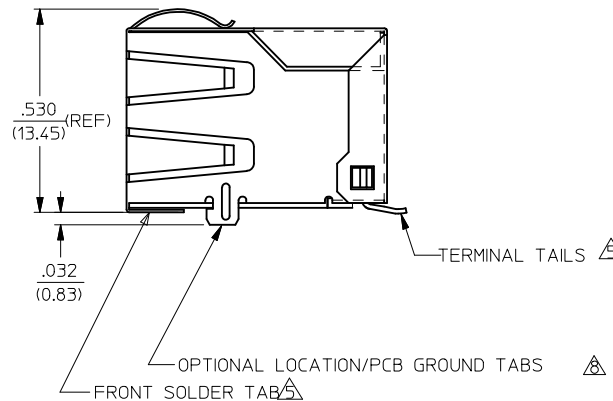
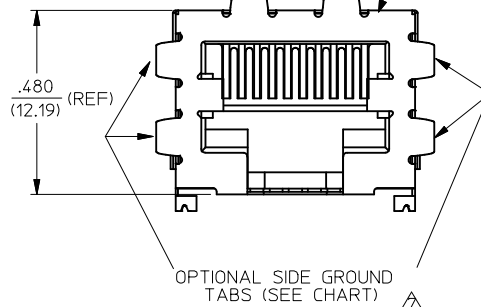
9) FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT.

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: JLOSTEMEIER 2008/12/10  
 CHKD: JBELLS 2008/12/10  
 APPR: FSMITH 2008/12/10

QUALITY SYMBOLS  
 ▽=0  
 ▽=0

DESCRIPTION  
 REV: D3

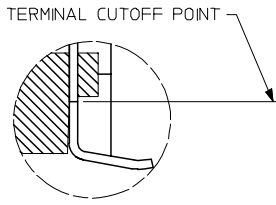
GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES ±	---
3 PLACES ±	---
2 PLACES ±	0.25
1 PLACE ±	---
ANGULAR ±1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

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	

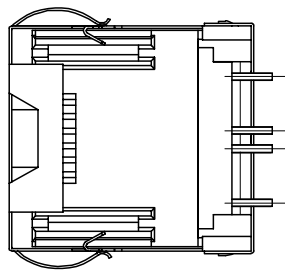
SCALE	1:1
DESIGN UNITS	INCH
THIRD ANGLE PROJECTION	
TITLE	
SINGLE PORT, SHIELDED SIZE 8, 8 CIRCUIT SMT MODJACK	
MOLEX INCORPORATED	
DOCUMENT NO.	SD-44282-001
SHEET NO.	1 OF 2
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

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

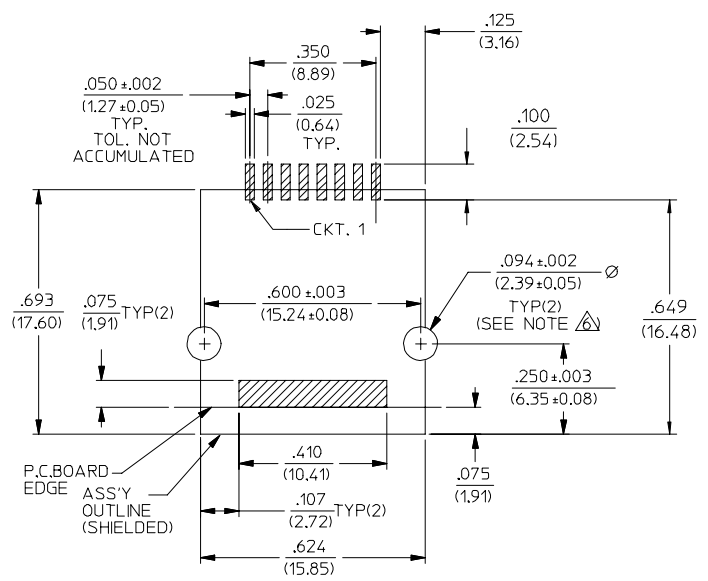
J  
I  
H  
G  
F  
E  
D  
C  
B  
A



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		
		mm	INCH	DRAWN BY STAMBAUG	DATE 99/06/03	TITLE SURFACE MOUNT MODULAR JACK W/ SHIELD				
		4 PLACES ± .010	± .010	CHECKED BY WIRKUS	DATE 99/06/03	MOLEX INCORPORATED DOCUMENT NO. SD-44282-001 SHEET NO. 2 OF 2				
		3 PLACES ± .025	± .025	APPROVED BY EDGLEY	DATE 99/06/03					
2 PLACES ± .050	± .050	MATERIAL NO.		SIZE C						
1 PLACE ± .100	± .100	ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						

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