

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

**Part Number:** [0437438101](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Low Profile, SMT, 8/8

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E107635

**General**

Product Family Modular Jacks/Plugs  
 Series [43743](#)  
 Comments Outboard Solder Tabs  
 Component Type PCB Jack  
 Magnetic No  
 Overview [modular\\_plugs\\_jacks](#)  
 Performance Category 3  
 Power over Ethernet (PoE) N/A  
 Product Name RJ45

**Physical**

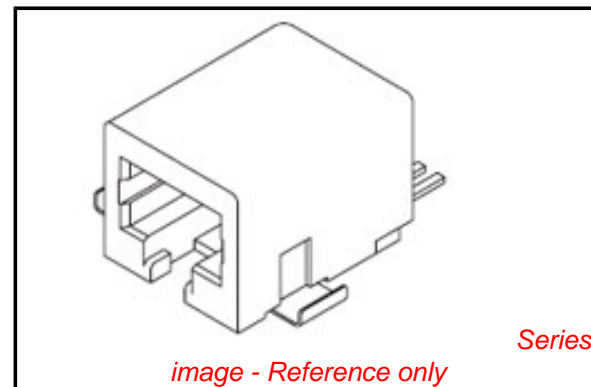
Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Inverted / Top Latch No  
 Lightpipes/LEDs None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Orientation Right Angle (Side Entry)  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating 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) 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  
 Shielded No  
 Voltage - Maximum 125V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 30



*image - Reference only*

**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](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**

[43743Series](#)

**Mates With**

FCC 68 Plugs

Lead-free Process Capability  
Max. Cycles at Max. Process Temperature  
Process Temperature max. C

Reflow Capable (SMT only)  
1  
235

**Material Info**

**Reference - Drawing Numbers**

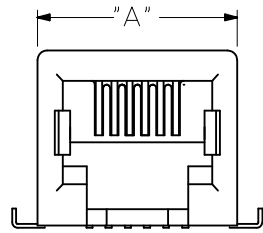
Packaging Specification  
Sales Drawing

PK-70873-700\*  
SDA-43743-\*\*\*\*

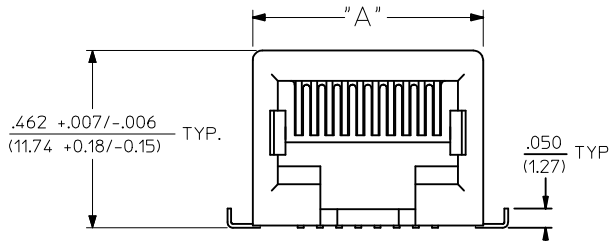
This document was generated on 06/07/2010

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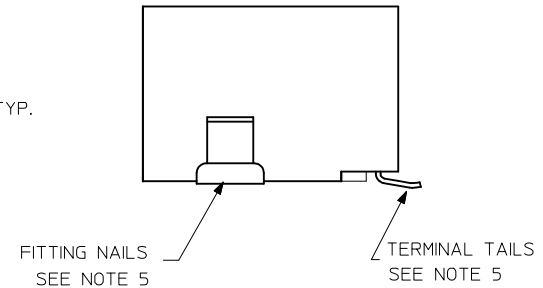
HOUSING SIZE	CIRCUIT SIZE	DIM. A	DIM. B
6	6	.520 (13.21)	.250 (6.35)
6	4	.520 (13.21)	.150 (3.81)
6	2	.520 (13.21)	.050 (1.27)
8	8	.600 (15.24)	.350 (8.89)
8	6	.600 (15.24)	.250 (6.35)



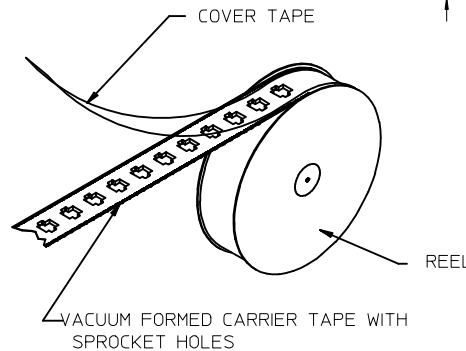
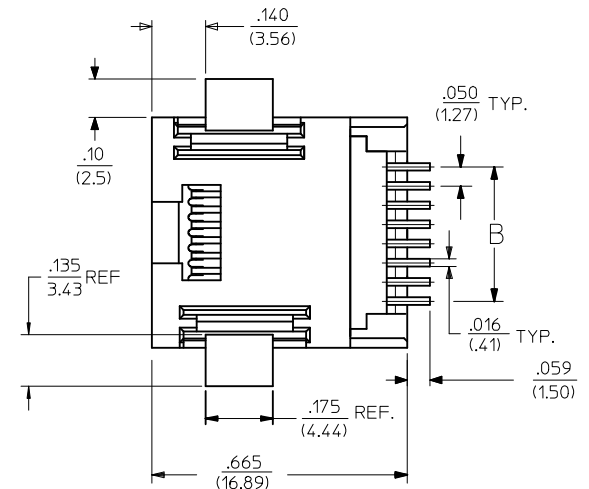
6 CIRCUIT ASSEMBLY



8 CIRCUIT ASSEMBLY



ASSEMBLY ITEM NO.	CONNECTOR SIZE	CIRCUIT SIZE	TERMINAL PLATING	TAPE & REEL PACKAGING No.	VOIDED CIRCUITS
43743-6001	6	6	A	PK-70873-7001	NA
43743-6002	6	6	B		
43743-6003	6	6	C		
43743-6101	6	4	A		
43743-6102	6	4	B		
43743-6103	6	4	C	PK-70873-7001	
43743-8101	8	8	A	PK-70873-7002	
43743-8102	8	8	B		
43743-8103	8	8	C		
43743-8201	8	6	A		
43743-8202	8	6	B		
43743-8203	8	6	C		
43743-8301	8	4	A		
43743-8302	8	4	B		
43743-8303	8	4	C	PK-70873-7002	
43743-6201	6	2	A	PK-70873-7001	
43743-6202	6	2	B	PK-70873-7001	
43743-6203	6	2	C	PK-70873-7001	NA



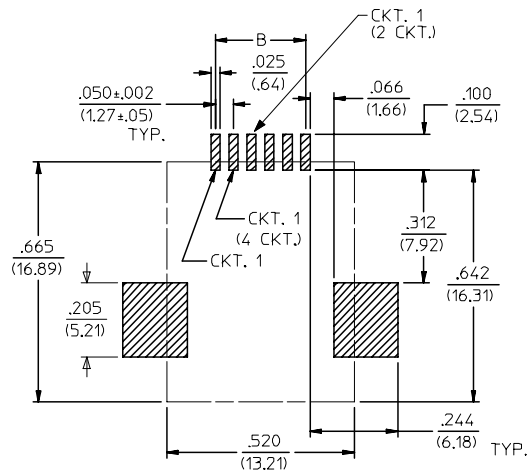
TAPE AND REEL PACKAGING

NOTES:

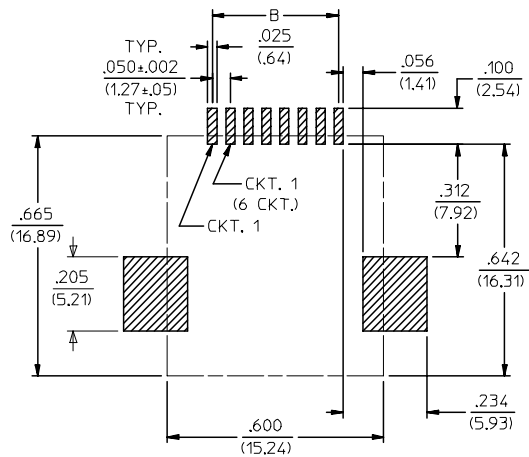
- MATERIAL:  
HOUSING & INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE, .012/(0.30) THICK  
FITTING NAILS: BRASS, .010/(0.25) THICK
- FINISH:  
TERMINALS:  
A = SELECT GOLD IN CONTACT AREA: .000050/(0.00127) MIN.,  
\*SELECT MATTE TIN IN PC TAIL AREA: .000100/(0.00254) MN.,  
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) MN.,  
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) MN.,  
WITH OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.  
FITTING NAILS:  
\*100 MICROINCHES MATTE TIN OVER 50 MICROINCHES NICKEL UNDERPLATE  
\*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 FITTING NAILS.
- PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43743-0001.
- PACKAGING SPECIFICATION:  
CONNECTOR ASSEMBLIES TO BE PACKAGED USING TAPE & REEL SYSTEM.
- COPLANARITY SPECIFICATION:  
WHEN AN ASSEMBLY IS PLACED UPON A LEVEL SURFACE, THE MAXIMUM GAP BETWEEN THE LEVEL SURFACE AND ALL TERMINAL TAILS AND BOTH FITTING NAILS IS .006/(0.15).
- FOR ASSEMBLIES HAVING VOIDED CIRCUITS, THE TAIL PORTION IS CUT AND REMOVED. THE MATING PORTION OF THE TERMINAL REMAINS INTACT. VOIDED CIRCUITS MUST BE THE SAME FOR BOTH PARTS.
- CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

2	H
1	J3
SHT	REV

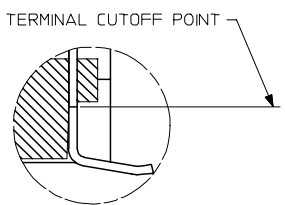
<b>REVISED NOTES</b> EC NO: UCP2009-1244 DRAWN: JLOSTEMEIER 2008/12/10 CHKD: JBEL 2008/12/10 APPR: FSMITH 2008/12/10 DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th colspan="2">mm</th><th colspan="2">INCH</th></tr> <tr><td>4 PLACES ±</td><td>---</td><td>±</td><td>---</td></tr> <tr><td>3 PLACES ±</td><td>---</td><td>±</td><td>.010</td></tr> <tr><td>2 PLACES ±</td><td>0.25</td><td>±</td><td>.014</td></tr> <tr><td>1 PLACE ±</td><td>0.36</td><td>±</td><td>---</td></tr> </table> ANGULAR ±1/2°	mm		INCH		4 PLACES ±	---	±	---	3 PLACES ±	---	±	.010	2 PLACES ±	0.25	±	.014	1 PLACE ±	0.36	±	---	DIMENSION STYLE <b>IN/MM</b>	SCALE <b>1:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION
	mm		INCH																							
	4 PLACES ±	---	±	---																						
	3 PLACES ±	---	±	.010																						
2 PLACES ±	0.25	±	.014																							
1 PLACE ±	0.36	±	---																							
DRAWN BY: PEARSON DATE: 6/18/96 CHECKED BY: PEARSON DATE: 6/18/96 APPROVED BY: EDGLEY DATE: 6/18/96		TITLE <b>SURFACE MOUNT MODULAR JACK</b>		<b>MOLEX INCORPORATED</b>																						
MATERIAL NO. <b>SEE CHARTS</b>		DOCUMENT NO. <b>SDA-43743-****</b>		SHEET NO. <b>1 OF 2</b>																						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																										



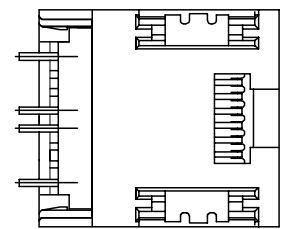
PC BOARD LAYOUT FOR 6 POSITION HOUSING (COMPONENT SIDE OF BOARD)



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



VIEW SHOWING TYPICAL TERMINAL CUTOFF OF TAIL (SEE NOTE 5) FOR VOIDED CIRCUITS.



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

SEE SHEET ONE EC NO: UCP2004-0798 DRWN:LSCHMIDT 2004/01/05 CHKD:LSCHMIDT 2004/01/05 APPR:FSMITH 2004/01/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE --- INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY																
	▼ = 0 ▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .012</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.36</td> <td>± .014</td> </tr> </table>		mm	INCH	4 PLACES	± .010	± .0004	3 PLACES	± .012	± .0005	2 PLACES	± 0.25	± .010	1 PLACE	± 0.36	± .014	DIMENSION STYLE IN/MM DRAWN BY PEARSON DATE 06/18/96 CHECKED BY PEARSON DATE 06/18/96	TITLE SURFACE MOUNT MODULAR JACK MOLEX INCORPORATED		
				mm	INCH																	
			4 PLACES	± .010	± .0004																	
3 PLACES	± .012	± .0005																				
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1 PLACE	± 0.36	± .014																				
APPROVED BY EDGLEY DATE 06/18/96			MATERIAL NO. SEE TABLE DOCUMENT NO. SDA-43743-**** SHEET NO. 2 OF 2																			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						