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Part Number: [0428786410](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Vertical, Low Profile, 6/4

Documents:

[3D Model](#) [Product Specification PS-42878 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

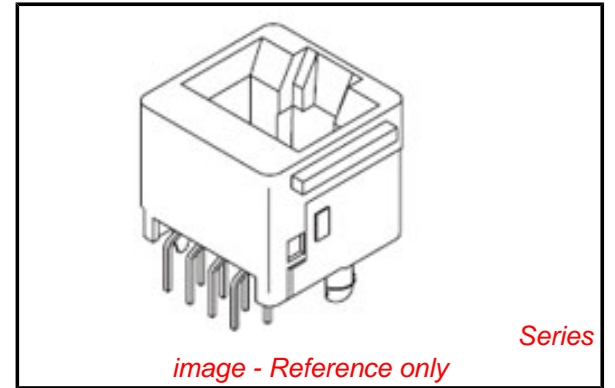
CSA LR19980
 UL E107635

General

Product Family Modular Jacks/Plugs
 Series [42878](#)
 Comments Flush Mount|Flangeless|2 PCB Thick
 Component Type PCB Jack
 Magnetic No
 Overview [modular_plugs_jacks](#)
 Performance Category 3
 Power over Ethernet (PoE) N/A
 Product Name RJ11

Physical

Boot Color N/A
 Color - Resin Black
 Durability (mating cycles max) 500
 Flammability 94V-0
 Inverted / Top Latch N/A
 Lightpipes/LEDs None
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin Polyester
 Orientation Vertical (Top Entry)
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.125 In
 PCB Thickness Recommended (mm) 3.18 mm
 Packaging Type Tray
 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 6/4
 Surface Mount Compatible (SMC) No
 Temperature Range - Operating -40°C to +85°C
 Termination Interface: Style Through Hole
 Waterproof / Dustproof No
 Wire/Cable Type N/A



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
 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

[42878Series](#)

Mates With

FCC 68 Plugs

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	150V AC (RMS)

Solder Process Data

Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235

Material Info**Reference - Drawing Numbers**

Packaging Specification	PK-42878-492
Product Specification	PS-42878
Sales Drawing	SDA-42878-****
Test Summary	TS-42878-001

This document was generated on 06/07/2010

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MODULAR JACK CHARACTERISTICS LEGEND

EXTERNAL CONNECTOR BODY DIMENSIONS: (SEE NOTES 8 AND 9)
 JACKS ARE AVAILABLE IN STANDARD 4, 6, AND 8 POSITION BODY SIZES

NUMBER OF CONTACT POSITIONS:
 CONNECTOR SIZE 4 CAN ACCOMMODATE 2 OR 4 TERMINALS,
 CONNECTOR SIZE 6 CAN ACCOMMODATE 2, 4, OR 6 TERMINALS,
 CONNECTOR SIZE 8 CAN ACCOMMODATE 2, 4, 6, 8, OR 10 TERMINALS

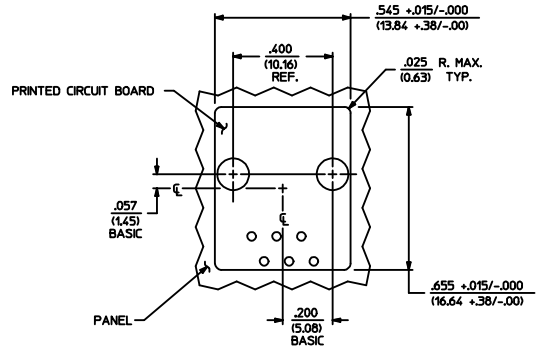
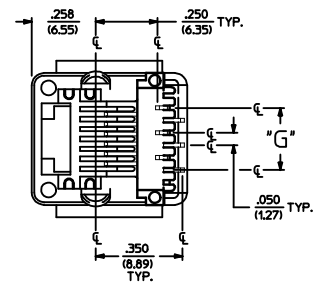
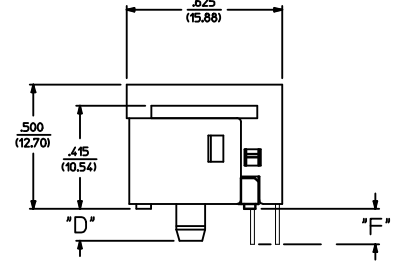
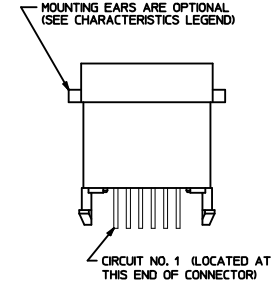
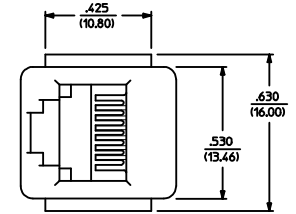
POLARIZATION OPTION:
 NO JACKS WITHOUT KEYING SLOT
 YES JACKS WITH KEYING SLOT (AVAILABLE ON CONNECTOR SIZE 8 ONLY)

MOUNTING EARS OPTION:
 YES JACKS WITH MOUNTING EARS
 NO JACKS WITHOUT MOUNTING EARS

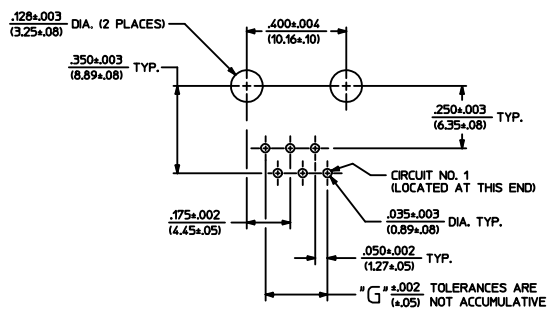
- NOTES:
- 1) MATERIALS: HOUSING- POLYESTER, GLASS FILLED, UL94V-0, COLOR - BLACK
 TERMINALS- PHOSPHOR BRONZE ALLOY, .015/(0.38) THICK.
 - 2) TERMINAL PLATING:
 *SELECT GOLD IN CONTACT AREA: 50 MICRONS MIN.
 *SELECT TIN IN PC TAIL AREA: 100 MICRONS MIN.
 WITH OVERALL NICKEL UNDERPLATE: 50 MICRONS MIN.
 *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 TAIL.
 - 3) THESE MODULAR JACKS MEET THE PERFORMANCE REQUIREMENTS OF MOLEX PRODUCT SPECIFICATION PS-42878.
 - 4) CONNECTORS ARE SHIPPED IN THERMOFORMED TRAYS, PER PACKAGING SPECIFICATION PK-42878-492.
 - 5) ALL JACKS ARE DESIGNED TO BE USED WITH .062/(1.57) OR .125/(3.18) THICK P.C. BOARDS.
 - 6) ALL JACKS CONFORM TO AND ACCEPT PLUGS WHICH CONFORM TO FCC RULES AND REGULATIONS PART 68, SUBPART F.
 - 7) ALL JACKS MUST BE CAPABLE OF FITTING INTO MOLEX GAGE G-42410 (CONNECTOR SIZE 6).
 - 8) SEE SHEETS 1 & 4 FOR CONNECTOR SIZE 4.
 - 9) SEE SHEETS 3 & 5 FOR CONNECTOR SIZE 8.
 - 10) ENGRAVED NUMBERS ON HOUSING BODY ARE FOR MOLDING IDENTIFICATION ONLY. THEY ARE NOT INTENDED FOR ASSEMBLY IDENTIFICATION PURPOSES.
 - 11) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002 WITH THE EXCEPTION OF THE *SINK WHICH CONFORMS TO CLASS C REQUIREMENTS.

P. C. BOARD THICKNESS	DIM. "D" (MTG. PEGS)	DIM. "F" (P.C. TAILS)
.062/(1.57)	.128 (3.25)	.120 \pm .015/-0.025 (3.05 \pm .38/-63)
.125/(3.18)	.191 (4.85)	.205 \pm .015/-0.025 (5.21 \pm .38/-63)

CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
6	6	.250 (6.35)
6	4	.150 (3.81)
6	2	.050 (1.27)



PANEL CUT-OUT FOR CONNECTOR SIZE 6



P.C. BOARD LAYOUT FOR CONNECTOR SIZE 6

SIZE 6 MODULAR JACK LOADED WITH 6 TERMINALS SHOWN ABOVE

ADD COSMETIC SPEC ELEC NO. UCP2009-1267 DRAWN: JKL/STENLER 2008/12/02 CHKD: BEL 2008/12/02 APPR: FSW/TH 2008/12/02 REV:	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 DRAWN BY DATE BAP 1992/04/02 CHECKED BY DATE BAP 1992/04/02 APPROVED BY DATE RAS 1992/04/02	1:1	INCH	MOLEX INCORPORATED MOLEX INCORPORATED
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4	MATERIAL NO. DATE SDA-42878-**** 1992/04/02	DOCUMENT NO. SHEET NO. SDA-42878-**** 2 OF 5	ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 6)	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

*X=NOT TOOLED	ASSEMBLY NUMBER	PART CHARACTERISTICS			
		EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P. C. BOARD THICKNESS	MOUNTING EARS OPTION
	42878-4216	4 POS. BODY	4	.062	YES
	42878-4218	↑	4	.062	NO
	42878-4264		4	.125	YES
	42878-4266		4	.125	NO
	42878-4360		2	.062	YES
	42878-4362		2	.062	NO
	42878-4408	↓	2	.125	YES
	42878-4410	4 POS. BODY	2	.125	NO

*X=NOT TOOLED	ASSEMBLY ITEM NUMBER	PART CHARACTERISTICS			
		EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P. C. BOARD THICKNESS	MOUNTING EARS OPTION
	42878-6216	6 POS. BODY	6	.062	YES
	42878-6218	↑	6	.062	NO
	42878-6264		6	.125	YES
	42878-6266		6	.125	NO
	42878-6360		4	.062	YES
	42878-6362		4	.062	NO
	42878-6408		4	.125	YES
	42878-6410		4	.125	NO
	42878-6504		2	.062	YES
	42878-6506		2	.062	NO
	42878-6552	↓	2	.125	YES
	42878-6554	6 POS. BODY	2	.125	NO

CHARACTERISTICS LEGEND	
EXTERNAL CONNECTOR BODY DIMENSIONS: AVAILABLE IN 4, 6, AND 8 POSITION BODY	
NUMBER OF CONTACT POSITIONS: CONNECTOR SIZE 4 ACCOMMODATES 2, OR 4 TERMINALS; CONNECTOR SIZE 6 ACCOMMODATES 2, 4, OR 6 TERMINALS; CONNECTOR SIZE 8 ACCOMMODATES 2, 4, 6, 8, OR 10 TERMINALS	
POLARIZATION OPTION (AVAILABLE ON CONNECTOR SIZE 8 ONLY) *NO*- WITHOUT KEYING SLOT *YES*- WITH KEYING SLOT	
MOUNTING EARS OPTION: *YES*- PART WITH MOUNTING EARS *NO*- PART WITHOUT MOUNTING EARS	

(SEE SHEET 1 & 2 FOR PART DESCRIPTIONS AND DIMENSIONS)

SEE SHEET ONE EC NO: UCP2004-667 DRAWN:LSCHMIDT 2004/03/03 CHKD:LSCHMIDT 2004/03/03 APPR:FSMITH 2004/03/03 H	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE	DESIGN UNITS	<input checked="" type="checkbox"/> THIRD ANGLE PROJECTION	REVISE ON CAD ONLY																			
	<input checked="" type="checkbox"/> 0 <input checked="" type="checkbox"/> 0	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>3 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>2 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>1 PLACE</td> <td>± .---</td> <td>± .---</td> </tr> </table>		mm	INCH			4 PLACES	± .---	± .---	3 PLACES	± .---	± .---	2 PLACES	± .---	± .---	1 PLACE	± .---	± .---	<table border="1"> <tr> <th colspan="2">DIMENSION STYLE</th> </tr> <tr> <td>IN/MM</td> <td></td> </tr> </table>	DIMENSION STYLE		IN/MM		---	INCH
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