

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

**Part Number:** [0428786506](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Vertical, Low Profile, 6/2

**Documents:**

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

**Agency Certification**

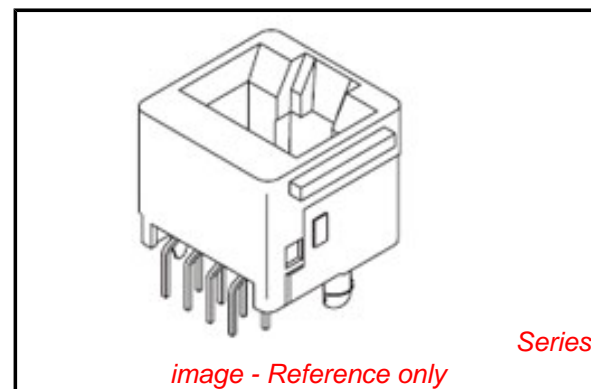
CSA LR19980  
 UL E107635

**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) 0.062 In  
 PCB Thickness Recommended (mm) 1.57 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 6/2  
 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  
 Contains SVHC: No**  
**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**

[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

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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

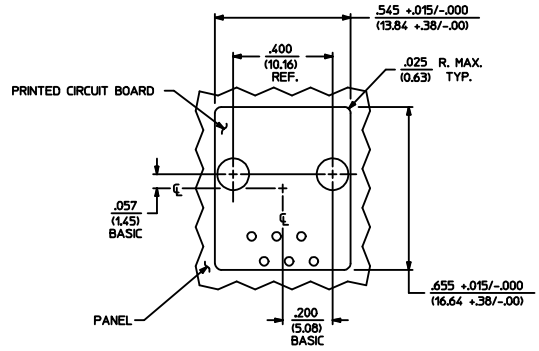
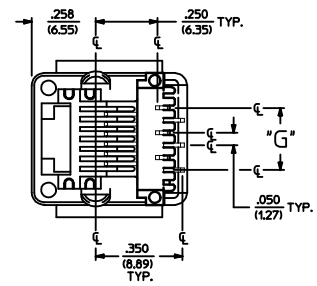
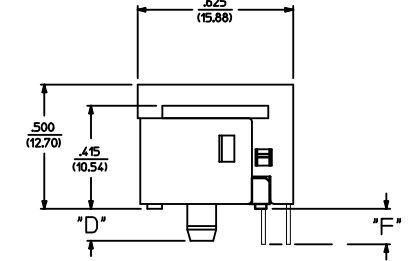
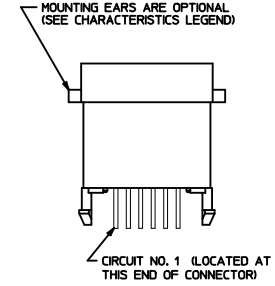
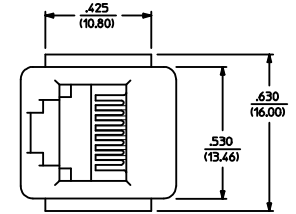
POLARIZATION OPTION:  
 \*NO\* JACKS WITHOUT KEYING SLOT  
 \*YES\* JACKS WITH KEYING SLOT (AVAILABLE ON CONNECTOR SIZE 8 ONLY)

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

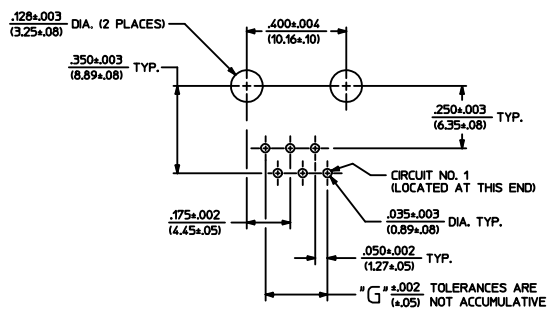
- NOTES:
- 1) MATERIALS: HOUSING- POLYESTER, GLASS FILLED, UL94V-0, COLOR - BLACK  
 TERMINALS- PHOSPHOR BRONZE ALLOY, .015/(0.38) THICK.
  - 2) TERMINAL PLATING:  
 \*SELECT GOLD IN CONTACT AREA: 50 MICRONS MIN.  
 \*SELECT TIN IN PC TAIL AREA: 100 MICRONS MIN.  
 WITH OVERALL NICKEL UNDERPLATE: 50 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. UCFP2009-1267 DRAWN: JKL/STENLER 2008/12/02 CHKD: BEL 2008/12/02 APPR: FSW/TH 2008/12/02 H2 REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE BAP 1992/04/02 CHECKED BY DATE BAP 1992/04/02 APPROVED BY DATE RAS 1992/04/02	SCALE 1:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 6) MOLEX INCORPORATED DOCUMENT NO. SDA-42878-**** SHEET NO. 2 OF 5
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
	MATERIAL NO. SEE SHEET 4 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	SIZE D				

*X=NOT TOOLED		PART CHARACTERISTICS			
ASSEMBLY NUMBER	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		PART CHARACTERISTICS			
ASSEMBLY ITEM NUMBER	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)	

<b>SEE SHEET ONE</b> EC NO: UCP2004-467 DRAWN: LSCHMIDT 2004/03/03 CHKD: LSCHMIDT 2004/03/03 APPR: ESMITH 2004/03/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
	▽ .0	mm INCH	IN/MM	DIMENSION STYLE	ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 4 & 6)	
	▽ .0	4 PLACES ± .0008 3 PLACES ± .0012 2 PLACES ± .0016 1 PLACE ± .0020	DRAWN BY DATE BAP 1992/04/09	BAP	MATERIAL NO. MOLEX INCORPORATED	
		ANGULAR ±1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE BAP 1992/04/09	APPROVED BY DATE RAS 1992/04/09	DOCUMENT NO. SDA-42878-****	SHEET NO. 4 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						