

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0428786264](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Vertical, Low Profile, 6/6, Panel Stops

Documents:

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

Agency Certification

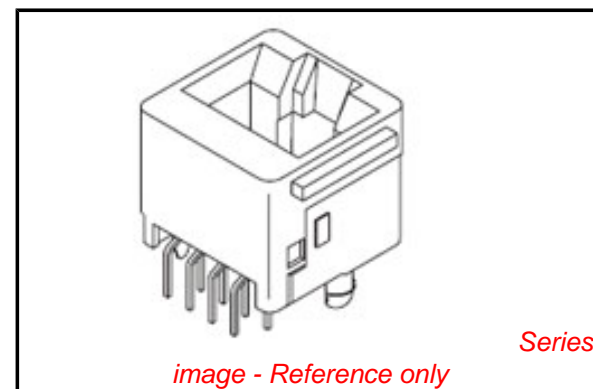
CSA LR19980
 UL E107635

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 6/6
 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 |

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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

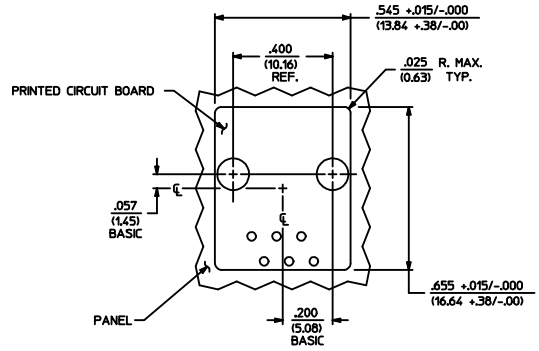
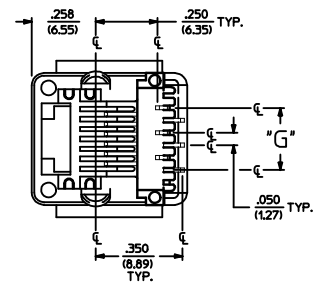
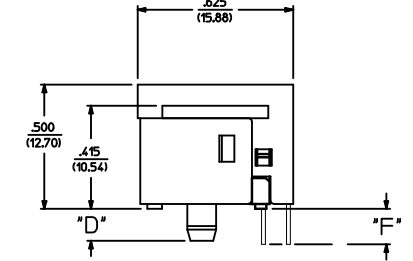
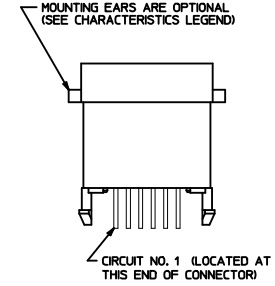
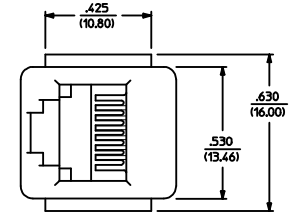
POLARIZATION OPTION:
 NO JACKS WITHOUT KEYING SLOT
 YES JACKS WITH KEYING SLOT (AVAILABLE ON CONNECTOR SIZE 8 ONLY)

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

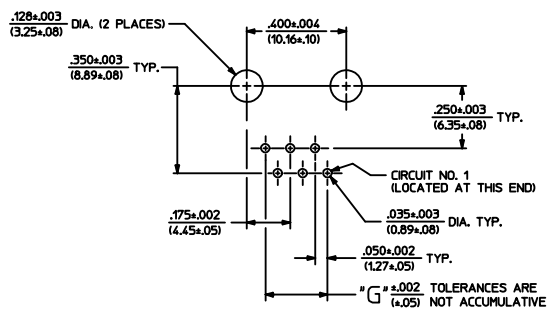
- NOTES:
- 1) MATERIALS: HOUSING- POLYESTER, GLASS FILLED, UL94V-0, COLOR - BLACK
 TERMINALS- PHOSPHOR BRONZE ALLOY, .015/(0.38) THICK.
 - 2) TERMINAL PLATING:
 *SELECT GOLD IN CONTACT AREA: 50 MICRONS MIN.
 *SELECT TIN IN PC TAIL AREA: 100 MICRONS MIN.
 WITH OVERALL NICKEL UNDERPLATE: 50 MICRONS MIN.
 *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 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 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | MATERIAL NO. DOCUMENT NO. | TITLE ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 6) | SDA-42878-**** 2 OF 5 | SHEET NO. |

| *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 |
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| *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 |
| | | | | | |
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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: UCF2004-667 DRAWN:LSCHMIDT 2004/03/03 CHKD:LSCHMIDT 2004/03/03 APPR:FSMITH 2004/03/03 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION REVISE ON CAD ONLY |
| | ▽.0 | mm INCH | --- | INCH | |
| | ▽.0 | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- | IN/MM | DIMENSION STYLE DRAWN BY DATE BAP 1992/04/09 | |
| | | ANGULAR ±1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY DATE RAS 1992/04/09 | TITLE ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 4 & 6) MOLEX MOLEX INCORPORATED | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | MATERIAL NO. (DOCUMENT NO.) SEE CHART SDA-42878-**** |
| | | | | | SHEET NO. 4 OF 5 |