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Part Number: [0424109178](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Vertical, 8/2

Documents:

[3D Model](#) [Product Specification PS-42410 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E107635

General

Product Family Modular Jacks/Plugs
 Series [42410](#)
 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 RJ45

Physical

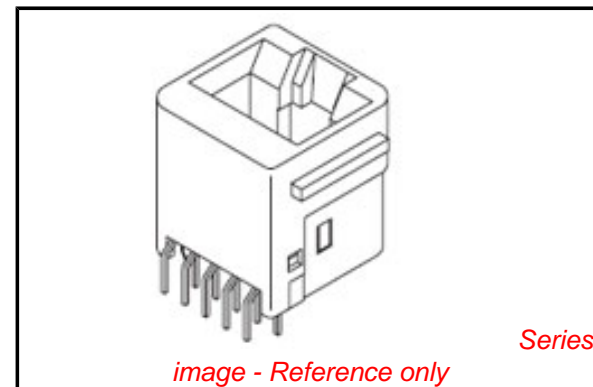
Color - Resin Black
 Durability (mating cycles max) 500
 Flammability 94V-0
 Inverted / Top Latch N/A
 Lightpipes/LEDs None
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin Polyester
 Orientation Vertical (Top Entry)
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Ports 1
 Positions / Loaded Contacts 8/2
 Surface Mount Compatible (SMC) No
 Temperature Range - Operating -40°C to +80°C
 Termination Interface: Style Through Hole
 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) 5
 Lead-free Process Capability Wave Capable (TH only)
 Max. Cycles at Max. Process Temperature 1



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

[42410Series](#)

Mates With

FCC 68 Plugs

Process Temperature max. C

235

Material Info

Reference - Drawing Numbers

Packaging Specification

PK-42410-492

Product Specification

PS-42410

Sales Drawing

SDA-42410-****

Test Summary

TS-42878-001

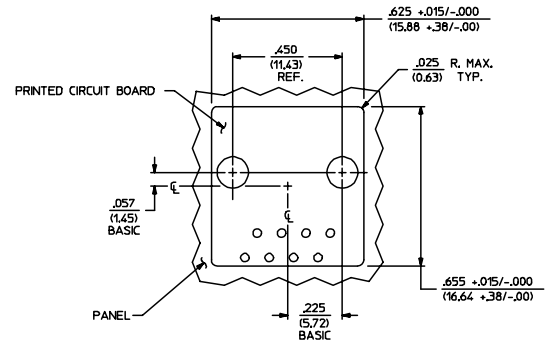
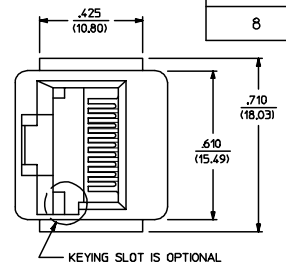
This document was generated on 06/07/2010

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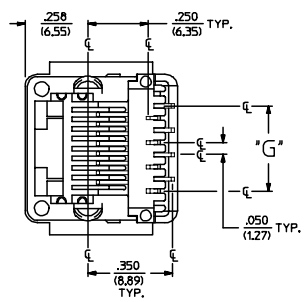
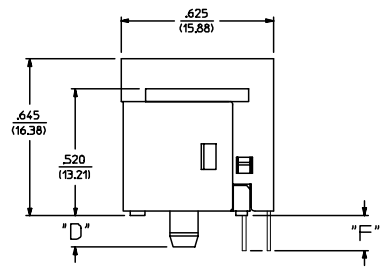
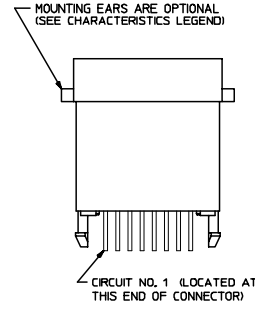
- NOTES:
- 1) MATERIALS: HOUSING PARTS ARE MADE OF POLYESTER, RATED UL, 94 V-0, COLOR IS BLACK; TERMINALS ARE .075/(0.38) THICK PHOSPHOR BRONZE.
 - 2) TERMINAL PLATING OPTIONS PER ES-88-****:
 - A - SELECT GOLD IN CONTACT AREA; 50 MICRONS MIN.
 - *SELECT TN IN PC TAIL AREA; 100 MICRONS MIN.
 - WITH OVERALL 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 TN-LEAD IN THE PC TAIL.
 - 3) THESE MODULAR JACKS MEET THE PERFORMANCE REQUIREMENTS OF MOLEX PRODUCT SPECIFICATION PS-42410.
 - 4) CONNECTORS ARE TO BE PACKED IN THERMOFORMED TRAYS, PER PACKAGING SPECIFICATION PK-42410-492.
 - 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, WHEN PLATED WITH 50 MICRONS GOLD.
 - 7) ALL JACKS MUST BE CAPABLE OF FITTING INTO MOLEX GAGE G-42410 (CONNECTOR SIZE 4).
 - 8) SEE SHEETS 1 & 4 FOR CONNECTOR SIZE 4.
 - 9) SEE SHEETS 2 & 4 FOR CONNECTOR SIZE 6.
 - 10) SEE SHEET 4 FOR ASSEMBLY ITEM NUMBERS.
 - 11) THIS MODULAR JACK ASSEMBLY IS ALSO AVAILABLE IN A UL 94V-0 RATED, GLASS-FILLED NYLON. (SEE MOLEX DRAWING SDA-42576)
 - 12) ENGRAVED NUMBERS ON HOUSING BODY ARE FOR HOLDING IDENTIFICATION ONLY. THEY ARE NOT INTENDED FOR ASSEMBLY IDENTIFICATION PURPOSES.
 - 13) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.

P.C. BOARD THICKNESS	DIM. "D" (MTG. PEGS)	DIM. "F" (P.C. TAILS)
.062/(1.57)	.128 (3.25)	.120 +.015/-.025 (3.05 +.38/-.63)
.125/(3.18)	.191 (4.85)	.205 +.015/-.025 (5.21 +.38/-.63)

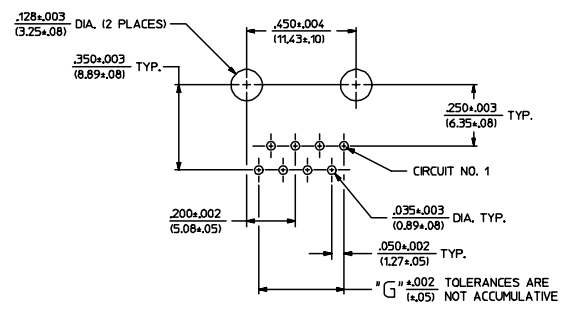
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
8	8	.350 (8.89)
8	6	.250 (6.35)
8	4	.150 (3.81)
8	2	.050 (1.27)



PANEL CUT-OUT FOR CONNECTOR SIZE 8



SIZE 8 MODULAR JACK LOADED WITH 8 TERMINALS SHOWN ABOVE
(SEE SHEET 4 FOR PART NUMBER AVAILABILITY)



P.C. BOARD LAYOUT FOR CONNECTOR SIZE 8

SEE SHEET ONE EC NO. UCP2004-667 DRAWN:LSCHMIDT 2004/03/03 CHKD:LSCHMIDT 2004/03/03 APPR:ESMITH 2004/03/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY														
	DESCRIPTION	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .010</td> <td>± .004</td> </tr> <tr> <td>3 PLACES</td> <td>± .015</td> <td>± .006</td> </tr> <tr> <td>2 PLACES</td> <td>± .020</td> <td>± .008</td> </tr> <tr> <td>1 PLACE</td> <td>± .030</td> <td>± .012</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± .010	± .004	3 PLACES	± .015	± .006	2 PLACES	± .020	± .008	1 PLACE	± .030	± .012	DIMENSION STYLE IN/MM	DRAWN BY DATE	TITLE
	mm	INCH																		
4 PLACES	± .010	± .004																		
3 PLACES	± .015	± .006																		
2 PLACES	± .020	± .008																		
1 PLACE	± .030	± .012																		
		ANGULAR ±1/2°	DRAWN BY DATE	ASSEMBLY, VERTICAL MODULAR JACKS (CONNECTOR SIZE 8)																
		DRAFT WHERE APPLICABLE	CHECKED BY DATE	MOLEX MOLEX INCORPORATED																
		MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE	SEE SHEET 4 SDA-42410-****	SHEET NO. 3 OF 4															
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																

SIZE 4 VERTICAL MODJACK ASSEMBLIES					
PART CHARACTERISTICS					
ASSEMBLY ITEM NUMBER	EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P.C. BOARD THICKNESS	MOUNTING EARS OPTION	TERMINAL PLATING OPTION
42410-4168	4 POS. BODY	4	.062/(1.57)	YES	A
42410-4170	↑	↑	.062/(1.57)	NO	A
42410-4264	↓	↓	.125/(3.18)	YES	A
42410-4266	4 POS. BODY	4	.125/(3.18)	NO	A
42410-4312	4 POS. BODY	2	.062/(1.57)	YES	A
42410-4314	↑	↑	.062/(1.57)	NO	A
42410-4408	↓	↓	.125/(3.18)	YES	A
42410-4410	4 POS. BODY	2	.125/(3.18)	NO	A

SIZE 6 VERTICAL MODJACK ASSEMBLIES					
PART CHARACTERISTICS					
ASSEMBLY ITEM NUMBER	EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P.C. BOARD THICKNESS	MOUNTING EARS OPTION	TERMINAL PLATING OPTION
42410-6168	6 POS. BODY	6	.062/(1.57)	YES	A
42410-6170	↑	↑	.062/(1.57)	NO	A
42410-6264	↓	↓	.125/(3.18)	YES	A
42410-6266	6 POS. BODY	6	.125/(3.18)	NO	A
42410-6312	6 POS. BODY	4	.062/(1.57)	YES	A
42410-6314	↑	↑	.062/(1.57)	NO	A
42410-6320	↑	↑	.062/(1.57)	YES	B
42410-6408	↓	↓	.125/(3.18)	YES	A
42410-6410	6 POS. BODY	4	.125/(3.18)	NO	A
42410-6456	6 POS. BODY	2	.062/(1.57)	YES	A
42410-6458	↑	↑	.062/(1.57)	NO	A
42410-6552	↓	↓	.125/(3.18)	YES	A
42410-6554	6 POS. BODY	2	.125/(3.18)	NO	A

SIZE 8 VERTICAL MODJACK ASSEMBLIES						
PART CHARACTERISTICS						
ASSEMBLY ITEM NUMBER	EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P.C. BOARD THICKNESS	KEYING OPTION	MOUNTING EARS OPTION	TERMINAL PLATING OPTION
42410-8312	8 POS. BODY	8	.062/(1.57)	NO	YES	A
42410-8314	↑	↑	.062/(1.57)	NO	NO	A
42410-8360	↑	↑	.062/(1.57)	YES	YES	A
42410-8362	↑	↑	.062/(1.57)	YES	NO	A
42410-8504	↑	↑	.125/(3.18)	NO	YES	A
42410-8506	↑	↑	.125/(3.18)	NO	NO	A
42410-8552	↓	↓	.125/(3.18)	YES	YES	A
42410-8554	8 POS. BODY	8	.125/(3.18)	YES	NO	A
42410-8600	8 POS. BODY	6	.062/(1.57)	NO	YES	A
42410-8602	↑	↑	.062/(1.57)	NO	NO	A
42410-8648	↑	↑	.062/(1.57)	YES	YES	A
42410-8650	↑	↑	.062/(1.57)	YES	NO	A
42410-8792	↑	↑	.125/(3.18)	NO	YES	A
42410-8794	↑	↑	.125/(3.18)	NO	NO	A
42410-8840	↓	↓	.125/(3.18)	YES	YES	A
42410-8842	8 POS. BODY	6	.125/(3.18)	YES	NO	A
42410-8888	8 POS. BODY	4	.062/(1.57)	NO	YES	A
42410-8890	↑	↑	.062/(1.57)	NO	NO	A
42410-8936	↑	↑	.062/(1.57)	YES	YES	A
42410-8938	↑	↑	.062/(1.57)	YES	NO	A
42410-9080	↑	↑	.125/(3.18)	NO	YES	A
42410-9082	↑	↑	.125/(3.18)	NO	NO	A
42410-9128	↓	↓	.125/(3.18)	YES	YES	A
42410-9130	8 POS. BODY	4	.125/(3.18)	YES	NO	A
42410-9176	8 POS. BODY	2	.062/(1.57)	NO	YES	A
42410-9178	↑	↑	.062/(1.57)	NO	NO	A
42410-9224	↑	↑	.062/(1.57)	YES	YES	A
42410-9226	↑	↑	.062/(1.57)	YES	NO	A
42410-9368	↑	↑	.125/(3.18)	NO	YES	A
42410-9370	↑	↑	.125/(3.18)	NO	NO	A
42410-9416	↓	↓	.125/(3.18)	YES	YES	A
42410-9418	8 POS. BODY	2	.125/(3.18)	YES	NO	A

SEE SHEET ONE EC NO. UCP2004-167 DRWN:LSCHMIDT 2004/03/03 CHKD:LSCHMIDT 2004/03/03 APPR:ESMITH 2004/03/03 N	QUALITY SYMBOLS ▽ 0 ▽ 0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0005</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .0005	2 PLACES	± .005	± .0005	1 PLACE	± .005	± .0005	SCALE --- DESIGN UNITS INCH DIMENSION STYLE IN/MM	THIRD ANGLE PROJECTION REVISE ON CAD ONLY
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ±1/2°	DRAWN BY DATE GLT 1990/10/12 CHECKED BY DATE BAP 1990/10/12 APPROVED BY DATE RAS 1990/10/12	TITLE ASSEMBLY, VERTICAL MODULAR JACKS															
		MATERIAL NO. SEE CHART DOCUMENT NO. SDA-42410-**** SHEET NO. 4 OF 4	Molex MOLEX INCORPORATED																
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