

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

**Part Number:** [0424108794](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Vertical, 8/6

**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**

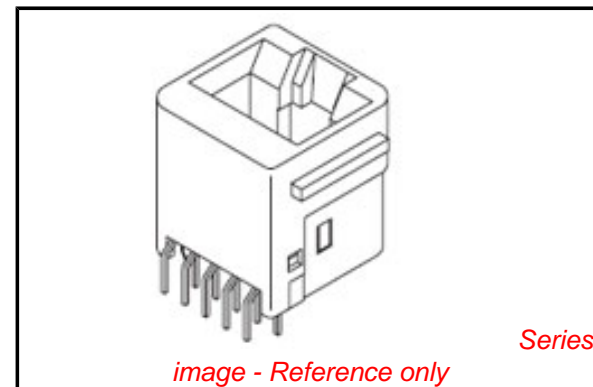
Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Inverted / Top Latch N/A  
 Lightpipes/LEDs None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Polyester  
 Orientation Vertical (Top Entry)  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.125 In  
 PCB Thickness Recommended (mm) 3.20 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Ports 1  
 Positions / Loaded Contacts 8/6  
 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](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**

[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

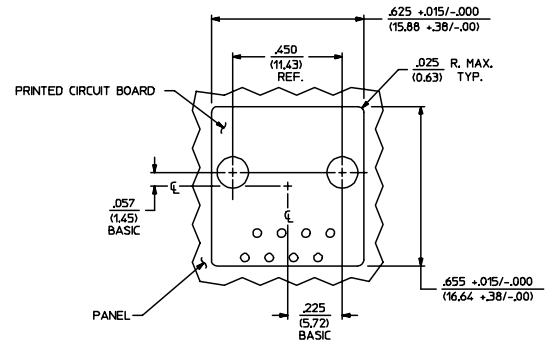
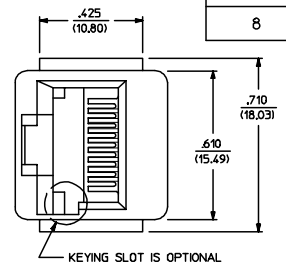
This document was generated on 06/07/2010

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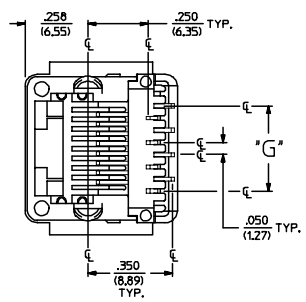
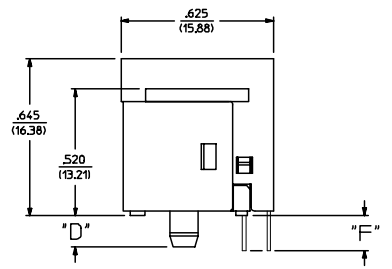
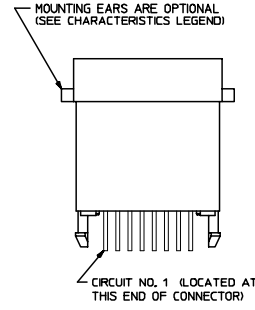
NOTES:  
 1) MATERIALS: HOUSING PARTS ARE MADE OF POLYESTER, RATED UL 94 V-0, COLOR IS BLACK; TERMINALS ARE .015/(0.38) THICK PHOSPHOR BRONZE.  
 2) TERMINAL PLATING OPTIONS PER ES-88-\*\*\*\*:  
 A - SELECT GOLD IN CONTACT AREA; 50 MICRONS MIN.  
 \*SELECT TIN IN PC TAIL AREA; 100 MICRONS MIN.  
 WITH 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-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)

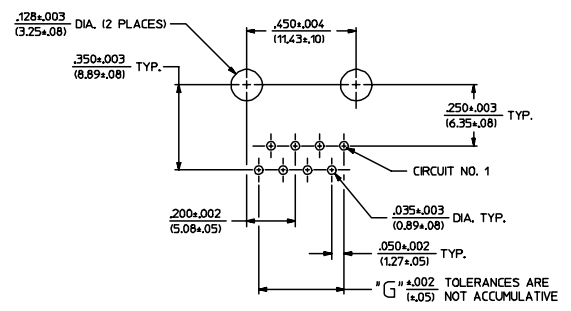
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
8	8	.350 (8.89)
8	6	.250 (6.35)
8	4	.150 (3.81)
8	2	.050 (1.27)



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	mm INCH	DIMENSION STYLE IN/MM	TITLE	ASSEMBLY, VERTICAL MODULAR JACKS (CONNECTOR SIZE 8)	
	▽ .0	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE GLT 1990/10/12	DRAWN BY DATE GLT 1990/10/12	MOLEX MOLEX INCORPORATED	
	▽ .0	ANGULAR ±1/2°	CHECKED BY DATE BAP 1990/10/12	APPROVED BY DATE RAS 1990/10/12	MATERIAL NO.	DOCUMENT NO. SHEET NO. SEE SHEET 4 SDA-42410-**** 3 OF 4
		DRAFT WHERE APPLICABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		MUST REMAIN WITHIN DIMENSIONS				

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	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY																																												
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