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Part Number: [0424108840](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Vertical, 8/6, Keyed, Panel Stops

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

Agency Certification

CSA LR19980
UL E107635

General

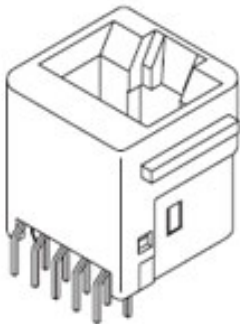
Product Family Modular Jacks/Plugs
Series [42410](#)
Component Type PCB Jack
Magnetic No
Overview [modular_plugs_jacks](#)
Performance Category 3
Power over Ethernet (PoE) N/A
Product Name RJ45

Physical

Boot Color N/A
Color - Resin Black
Durability (mating cycles max) 500
Flammability 94V-0
Inverted / Top Latch N/A
Keying to Mating Part Yes
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
Panel Mount With Flange
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
Ports 1
Positions / Loaded Contacts 8/6
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

Electrical

Current - Maximum per Contact 1.5A



Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Not Reviewed
**Halogen-Free
Status**

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](#)

Grounding to PCB	No
Grounding to Panel	None
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-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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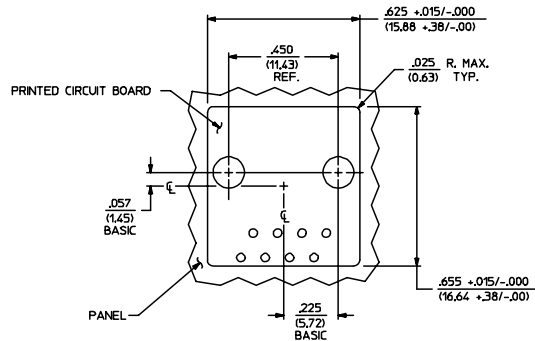
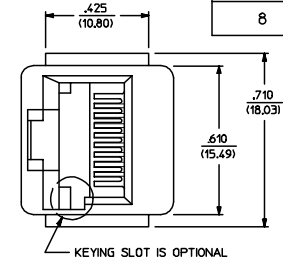
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NOTES:

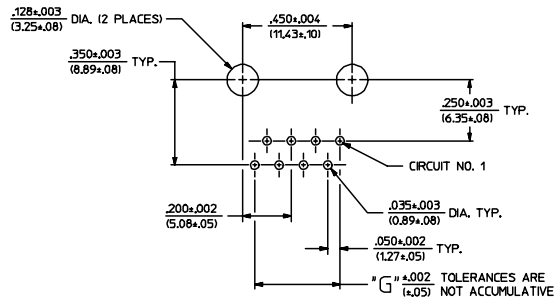
- 1) MATERIALS: HOUSING PARTS ARE MADE OF POLYESTER, RATED UL, 94 V-0, COLOR IS BLACK; TERMINALS ARE .015/(0.38) THICK PHOSPHOR BRONZE.
- 2) TERMINAL PLATING OPTIONS PER ES-88-***:
 - A - SELECT GOLD IN CONTACT AREA; 50 MICROINCHES MIN.,
 - *SELECT TIN IN PC TAIL AREA; 100 MICROINCHES MIN.,
 - WITH OVERALL NICKEL UNDERPLATE; 50 MICROINCHES 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 MICROINCHES 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-43576)
- 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)

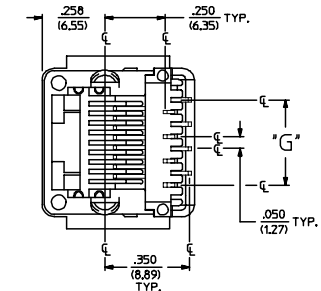
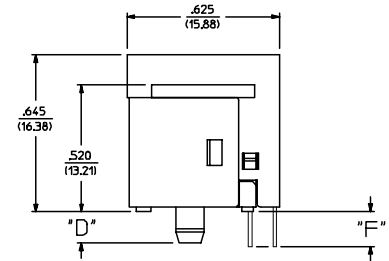
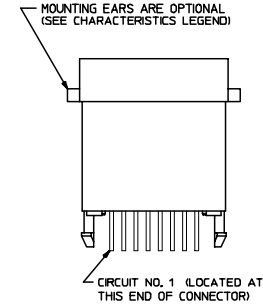
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
8	8	.350 (8.89)
8	6	.250 (6.35)
8	4	.150 (3.81)
8	2	.050 (1.27)



PANEL CUT-OUT FOR CONNECTOR SIZE 8



P.C. BOARD LAYOUT FOR CONNECTOR SIZE 8



SIZE 8 MODULAR JACK LOADED WITH 8 TERMINALS SHOWN ABOVE

(SEE SHEET 4 FOR PART NUMBER AVAILABILITY)

SEE SHEET ONE EC NO. UFP2004-667 DRAWN: SCHMIDT 2004/03/03 CHKD: SCHMIDT 2004/03/03 APPR: F. SMITH 2004/03/03 N	QUALITY SYMBOLS 0 0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION REVISIONS REV. 1 DATE 1990/10/12 BY RAS APPROVED BY RAS DATE 1990/10/12	TITLE ASSEMBLY, VERTICAL MODULAR JACKS (CONNECTOR SIZE 8) MOLEX INCORPORATED MATERIAL NO. SDA-42410-**** DOCUMENT NO. 3 OF 4 SHEET NO. 3 OF 4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
			4 PLACES	± .0005	± .0005	IN/MM			
			3 PLACES	± .0005	± .0005	IN/MM			
			2 PLACES	± .0005	± .0005	IN/MM			
SEE SHEET ONE EC NO. UFP2004-667 DRAWN: SCHMIDT 2004/03/03 CHKD: SCHMIDT 2004/03/03 APPR: F. SMITH 2004/03/03 N	QUALITY SYMBOLS 0 0	DESCRIPTION	1 PLACE	± .0005	± .0005	IN/MM	THIRD ANGLE PROJECTION REVISIONS REV. 1 DATE 1990/10/12 BY RAS APPROVED BY RAS DATE 1990/10/12	TITLE ASSEMBLY, VERTICAL MODULAR JACKS (CONNECTOR SIZE 8) MOLEX INCORPORATED MATERIAL NO. SDA-42410-**** DOCUMENT NO. 3 OF 4 SHEET NO. 3 OF 4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
			ANGULAR	± 1/2°	± 1/2°	IN/MM			
			DRAFT WHERE APPLICABLE	± .0005	± .0005	IN/MM			
			MUST REMAIN WITHIN DIMENSIONS	± .0005	± .0005	IN/MM			

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	SIZE 4 VERTICAL MODJACK ASSEMBLIES						SIZE 8 VERTICAL MODJACK ASSEMBLIES																		
	PART CHARACTERISTICS						PART CHARACTERISTICS																		
	ASSEMBLY ITEM NUMBER	EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P.C. BOARD THICKNESS	MOUNTING EARS OPTION	TERMINAL PLATING OPTION	ASSEMBLY ITEM NUMBER	EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P.C. BOARD THICKNESS	KEYING OPTION	MOUNTING EARS OPTION	TERMINAL PLATING OPTION												
	42410-4168	4 POS. BODY	4	.062/(1.57)	YES	A	42410-8312	8 POS. BODY	8	.062/(1.57)	NO	YES	A												
	42410-4170	↑	↑	.062/(1.57)	NO	A	42410-8314	↑	↑	.062/(1.57)	NO	NO	A												
	42410-4264	↓	↓	.125/(3.18)	YES	A	42410-8360	↑	↑	.062/(1.57)	YES	YES	A												
	42410-4266	4 POS. BODY	4	.125/(3.18)	NO	A	42410-8362	↑	↑	.062/(1.57)	YES	NO	A												
							42410-8504	↑	↑	.125/(3.18)	NO	YES	A												
	42410-4312	4 POS. BODY	2	.062/(1.57)	YES	A	42410-8506	↑	↑	.125/(3.18)	NO	NO	A												
	42410-4314	↑	↑	.062/(1.57)	NO	A	42410-8552	↓	↓	.125/(3.18)	YES	YES	A												
	42410-4408	↓	↓	.125/(3.18)	YES	A	42410-8554	8 POS. BODY	8	.125/(3.18)	YES	NO	A												
	42410-4410	4 POS. BODY	2	.125/(3.18)	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												