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Part Number: [0424108602](#)
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

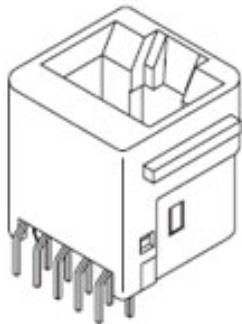
Product Family	Modular Jacks/Plugs
Series	42410
Comments	Flush Mount Flangeless 2 PCB Thick
Component Type	PCB Jack
Magnetic	No
Overview	modular_plugs_jacks
Performance Category	3
Power over Ethernet (PoE)	N/A
Product Name	RJ45

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)	0.062 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
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	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



Series

image - Reference only

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

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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42410

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NOTES:

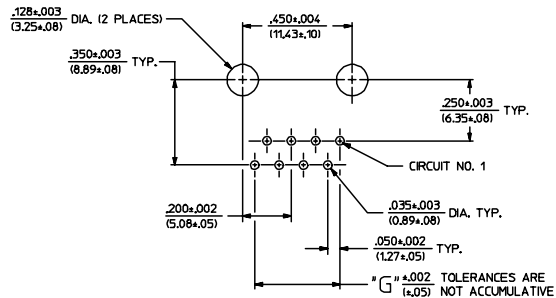
- 1) MATERIALS: HOUSING PARTS ARE MADE OF POLYESTER, RATED U.L. 94 V-0, COLOR IS BLACK; TERMINALS ARE .015/(0.38) THICK PHOSPHOR BRONZE.
- 2) TERMINAL PLATING OPTIONS PER ES-88-***:
 - A - SELECT GOLD IN CONTACT AREA; 50 MICROINCHES MIN.,
 - *SELECT TIN IN PC TAIL AREA; 100 MICROINCHES MIN.,
 - WITH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

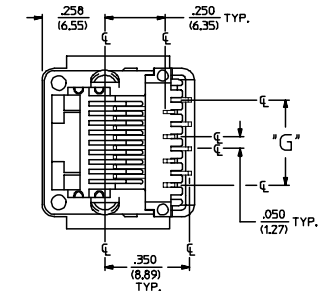
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
8	8	.350 (8.89)
8	6	.250 (6.35)
8	4	.150 (3.81)
8	2	.050 (1.27)



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 REV	QUALITY SYMBOLS ▽ 0 ▽ 0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION REVISE ON CAD ONLY	TITLE ASSEMBLY, VERTICAL MODULAR JACKS (CONNECTOR SIZE 8) MOLEX INCORPORATED	MATERIAL NO. DOCUMENT NO. SHEET NO. 3 OF 4	
			4 PLACES	± .0005	± .0005	DIMENSION STYLE IN/MM				
			3 PLACES	± .0005	± .0005	DRAWN BY GLT				DATE 1990/10/12
			2 PLACES	± .0005	± .0005	CHECKED BY BAP				DATE 1990/10/12
			1 PLACE	± .0005	± .0005	APPROVED BY RAS				DATE 1990/10/12
			ANGULAR ±1/2°		SERIAL NO. SEE SHEET 4					SDA-42410-****
			DRAFT WHERE APPLICABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					D
			MUST REMAIN WITHIN DIMENSIONS							

	20	19	18	17	16	15	14	13	12	11	42410	9	8	7	6	5	4	3	2	1					
	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												