

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0432498101](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, 8/10, Panel Stops

Documents:

3D Model	Product Specification PSX-43249 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E107635

General

Product Family	Modular Jacks/Plugs
Series	43249
Component Type	PCB Jack
Magnetic	No
Overview	modular_plugs_jacks
Performance Category	3, 4
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	No
Lightpipes/LEDs	None
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Orientation	Right Angle (Side Entry)
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 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	8/10
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No
Wire/Cable Type	N/A

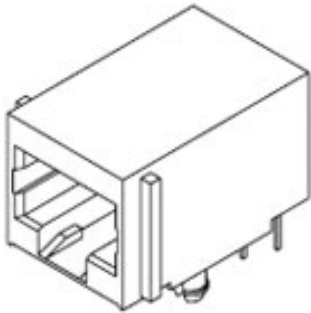


image - Reference only

Series

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Contains SVHC: No
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
[43249Series](#)

Mates With
FCC 68 Plugs

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
Voltage - Maximum	150V AC (RMS)

Solder Process Data

Lead-free Process Capability	Wave Capable (TH only)
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Material Info

Old Part Number	A432498101
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Reference - Drawing Numbers

Packaging Specification	PK-43249-004
Product Specification	PSX-43249
Sales Drawing	SDA-43249

This document was generated on 06/07/2010

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NOTES:

1) MATERIAL:

HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
 INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
 TERMINALS: PHOSPHOR BRONZE, .012/(0.30) THICK
 SHIELD: BRASS, .007/(0.18) THICK

2) FINISH:

TERMINALS:

- A = SELECT GOLD IN CONTACT AREA: 50 MICROINCHES / 1.27 MICROMETERS MIN.,
 *SELECT TIN IN PC TAIL AREA: 100 MICROINCHES / 2.54 MICROMETERS MIN.,
 WITH OVERALL NICKEL UNDERPLATE: 50 MICROINCHES / 1.27 MICROMETERS MIN.
 B = SELECT GOLD IN CONTACT AREA: 30 MICROINCHES / 0.76 MICROMETERS MIN.,
 *SELECT TIN IN PC TAIL AREA: 100 MICROINCHES / 2.54 MICROMETERS MIN.,
 WITH OVERALL NICKEL UNDERPLATE: 50 MICROINCHES / 1.27 MICROMETERS MIN.

SHIELD:

- *100 MICROINCHES / 2.54 MICROMETERS NICKEL OVER 50 MICROINCHES /
 1.27 MICROMETERS COPPER UNDERPLATE, PCB GROUND TABS DIPPED IN TIN
 *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 TAILS AND/OR SHIELD.

3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43249.

4) PACKAGING SPECIFICATION:

- UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS
 PER MOLEX PACKAGING SPECIFICATION PK-43249-004.
 UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN TUBES
 PER MOLEX PACKAGING SPECIFICATION PK-43249-005.
 SHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS
 PER MOLEX PACKAGING SPECIFICATION PK-44050-004.

5) MATES WITH: MODULAR PLUGS THAT CONFORM TO FCC REGULATION PART 68.5.

6) SEE SHEET 3 FOR SHIELDED JACK ASSEMBLY.

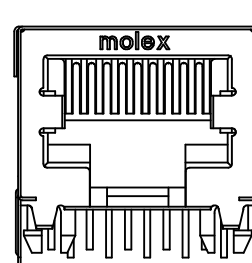
7) SEE SHEETS 5 & 6 FOR P.C. BOARD LAYOUTS.

8) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.

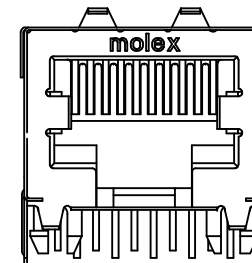
9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

10) THIS PART CONFORMS TO FCC REGULATION 68.5 AND TIA 1096 FOR MODULAR JACKS.

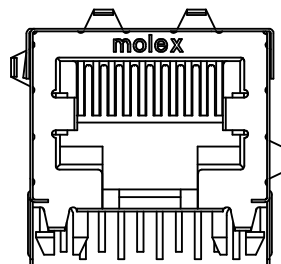
SIDE/TOP GROUND TAB OPTIONS FOR SHIELDS



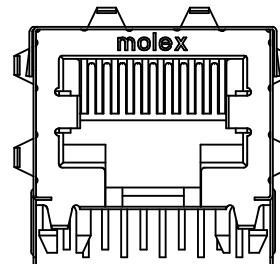
OPTION "A"
NO TOP OR SIDE TABS



OPTION "B"
TOP TABS

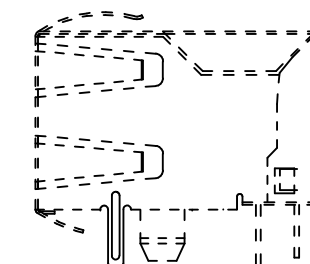


OPTION "C"
TOP AND STAGGERED SIDE TABS

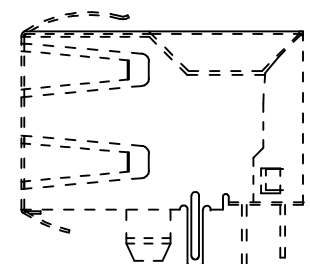


OPTION "D"
TOP AND SIDE TABS

BOTTOM PCB GROUND TAB OPTIONS FOR SHIELDS



OPTION "E"
OPTIONAL FRONT POSITION



OPTION "F"
OPTIONAL REAR POSITION

NOTE: EITHER PCB GROUND TAB OPTION IS AVAILABLE
ON ALL SIDE/TOP TAB CONFIGURATIONS

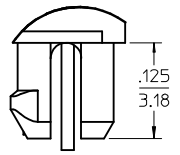
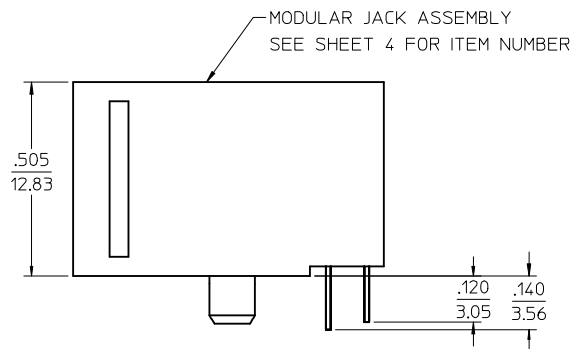
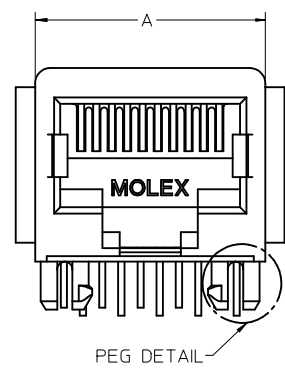
DRAWING LEGEND

- SHEET 1- NOTES, GROUND TAB OPTIONS
 SHEET 2- UNSHIELDED MODULAR JACK
 SHEET 3- SHIELDED MODULAR JACK WITH
 OPTIONAL SIDE/TOP GROUND TABS & BOTTOM GROUND
 TAB WITH OPTIONAL POSITION.
 SHEET 4- PART NUMBER CHARTS
 SHEET 5- FOOTPRINT LAYOUT FOR 8 POSITION HOUSING
 SHEET 6- FOOTPRINT LAYOUT FOR 6 POSITION HOUSING

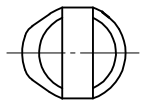
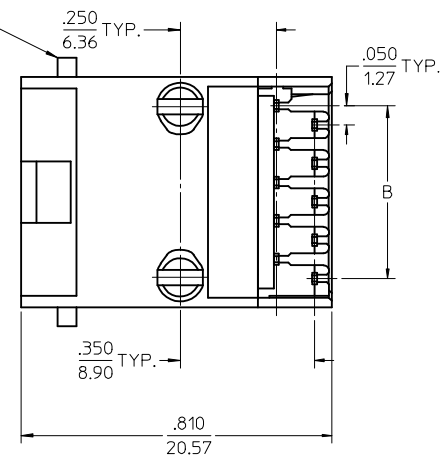
ADDED NOTE 10 EC NO: UCP2009-0740 DRWN: KLOSTERNER 2008/09/29 CHKD: JEBELL 2008/10/03 APPR: FSMITH 2008/10/03	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY
				mm	INCH	DRAWN BY JTR	DATE 1993/06/23	TITLE		
			4 PLACES	± ---	± ---	CHECKED BY	DATE			
			3 PLACES	± ---	± .010	JTR	1993/06/23			
			2 PLACES	± 0.25	± ---	APPROVED BY	DATE			
			1 PLACE	± ---	± ---	RAS	1993/06/23	 MOLEX INCORPORATED		
			ANGULAR ±1/2°			MATERIAL NO.	DOCUMENT NO.		SHEET NO.	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 4		SDA-43249		1 OF 6
K1	REV					SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

UNSHIELDED MODULAR JACK

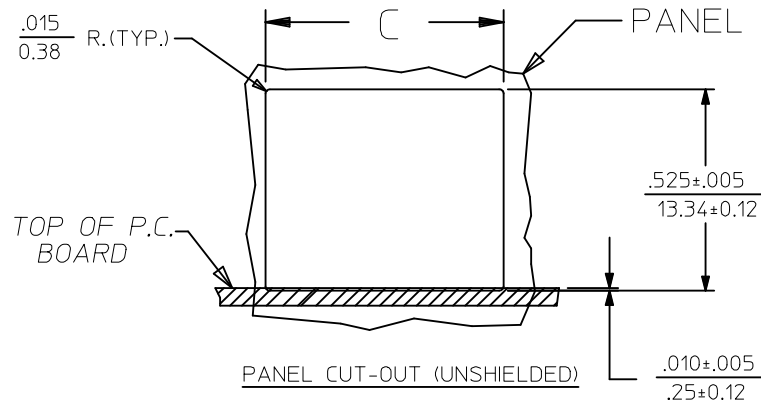
8 POSITION LOADED 10 SIZE SHOWN



OPTIONAL FLANGE
USED FOR FLUSH
MODULAR JACK



PEG DETAIL
SCALE 8:1

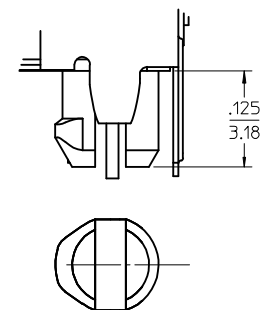
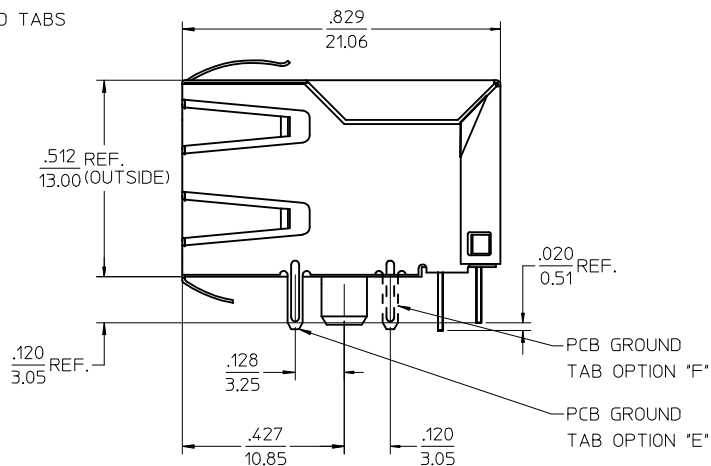
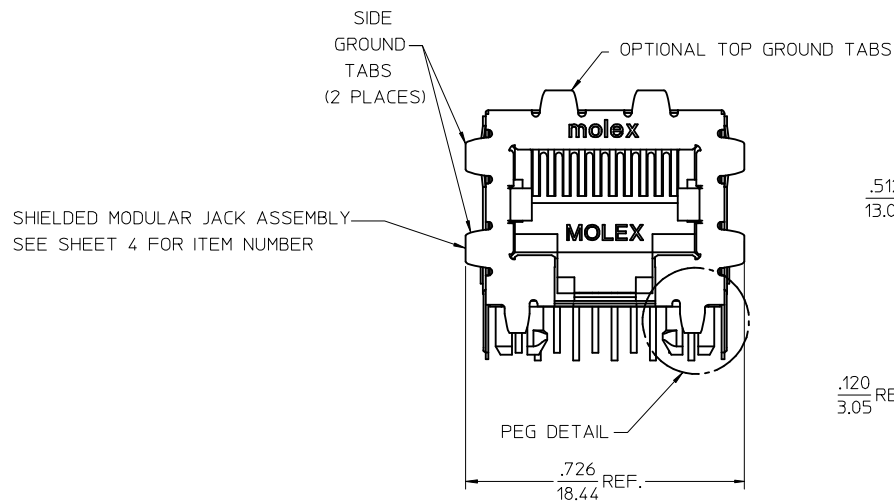


HOUSING SIZE	CIRCUIT SIZE	DIM. A	DIM. B	DIM. C
8	10	.600±.005 (15.24±0.13)	.450±.005 (11.43±0.13)	.620±.005 (15.75±0.13)
8	8	.600±.005 (15.24±0.13)	.350±.005 (8.89±0.13)	.620±.005 (15.75±0.13)
8	4	.600±.005 (15.24±0.13)	.150±.005 (3.81±0.13)	.620±.005 (15.75±0.13)
8	6	.600±.005 (15.24±0.13)	.250±.005 (6.35±0.13)	.620±.005 (15.75±0.13)
6	6	.520±.005 (13.21±0.13)	.250±.005 (6.35±0.13)	.540±.005 (13.72±0.13)
6	4	.520±.005 (13.21±0.13)	.150±.005 (3.81±0.13)	.540±.005 (13.72±0.13)
6	2	.520±.005 (13.21±0.13)	.050±.005 (1.27±0.13)	.540±.005 (13.72±0.13)

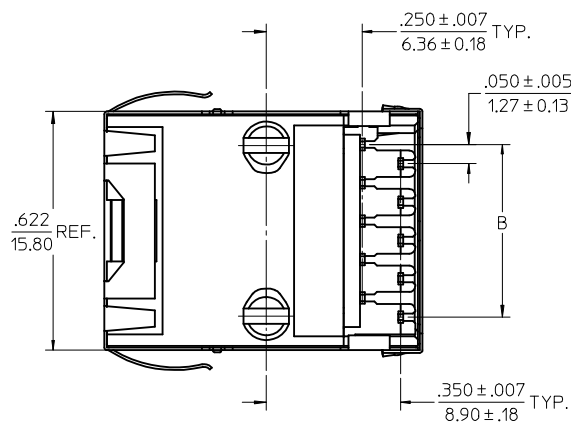
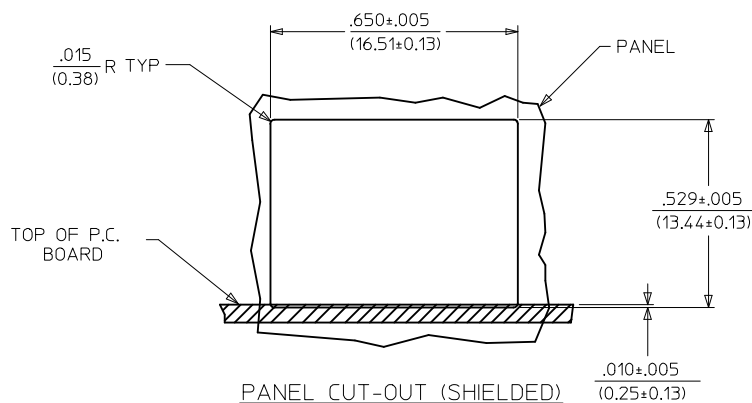
SEE SHEET 1 EC NO: UCP2009-0740 DRWN: JLOSTEME/ER 2008/09/29 CHKD: JBEL 2008/10/03 APPR: FSMITH 2008/10/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		mm		INCH		DRAWN BY JTR		DATE 1993/06/23	
		4 PLACES ± ---		± ---		CHECKED BY JTR		DATE 1993/06/23	
		3 PLACES ± ---		± .010		APPROVED BY RAS		DATE 1993/06/23	
		2 PLACES ± 0.25		± ---		MATERIAL NO. SEE SHEET 4		DOCUMENT NO. SDA-43249	
1 PLACE ± ---		± ---		ANGULAR ± 1/2°		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								SHEET NO. 2 OF 6	

MODULAR JACK W/ .007" THICK SHIELD AND OPTIONAL GROUND TABS

8 LOADED 10 VERSION SHOWN WITH GROUND TAB OPTIONS "D" AND "E"



PEG DETAIL
SCALE 8:1



DESCRIPTION OF GROUND TAB OPTIONS:
(SEE SHEET 4 FOR AVAILABLE COMBINATIONS OF OPTIONS)

GROUND TAB OPTION	DESCRIPTION
A	NO GROUND TABS
B	TOP TABS ONLY
C	STAGGERED SIDE TABS
D	TOP AND SIDE TABS
E	PCB GROUND TAB IN FRONT POSITION
F	PCB GROUND TAB IN REAR POSITION

HOUSING SIZE	CIRCUIT SIZE	B
8	10	.450 ± .005 11.43 ± 0.13
8	8	.350 ± .005 8.89 ± 0.13

SEE SHEET 1
EC NO: UCP2009-0740
DRWN: JKLOSTEMEIER 2008/09/29
CHKD: JEBEL 2008/10/03
APPR: FSMITH 2008/10/03

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES ±	± .010	± .004
3 PLACES ±	± .010	± .004
2 PLACES ±	± .025	± .010
1 PLACE ±	± .050	± .020

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
IN/MM

DRAWN BY DATE
JTR 1993/06/23

CHECKED BY DATE
JTR 1993/06/23

APPROVED BY DATE
RAS 1993/06/23

MATERIAL NO.
SEE SHEET 4

SIZE
C

SCALE
4:1

DESIGN UNITS
INCH

THIRD ANGLE PROJECTION

TITLE
LOW PROFILE RIGHT ANGLE
MODULAR JACK ASSEMBLY

MOLEX INCORPORATED

DOCUMENT NO.
SDA-43249

SHEET NO.
3 OF 6

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

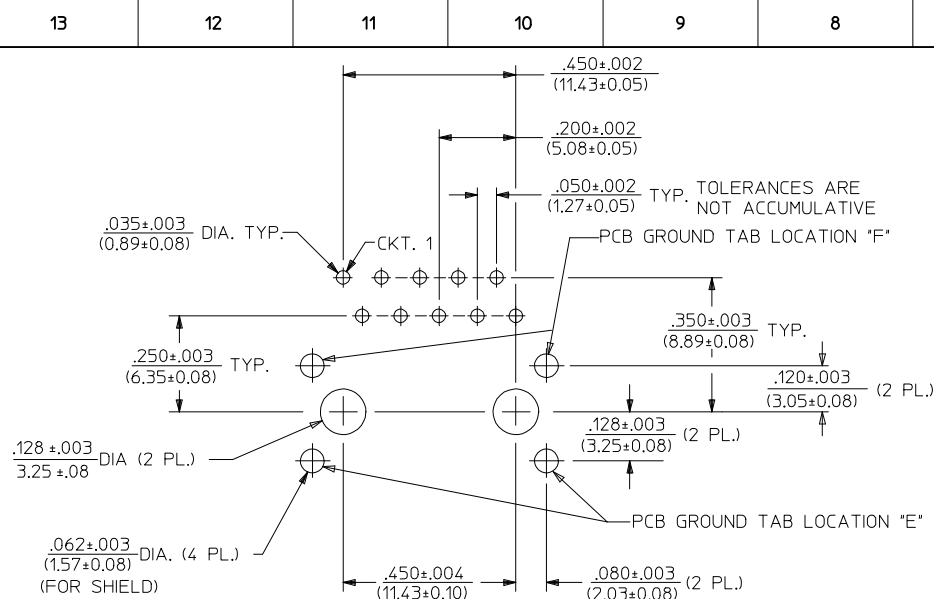
13	12	11	10	9	8	7	6	5	4	3	2	1
FLUSH MOUNT (UNSHIELDED)					SHIELDED, .007" THICK							
ASSEMBLY ITEM NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION		ASSEMBLY ITEM NUMBER	CONN. SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION	SIDE/TOP PANEL GROUND TAB OPTION	PCB GROUND TAB OPTION		PACKAGING OPTION
43249-8001	8	10	A		43249-8900	8	10	A	A	E		TRAY
43249-8004	8	8	A		43249-8901	8	10	A	B	E		TRAY
43249-8010	8	6	A		43249-8902	8	10	A	C	E		TRAY
43249-6001	6	6	A		43249-8903	8	10	A	D	E		TRAY
43249-6004	6	4	A		43249-8908	8	10	A	A	F		TRAY
43249-6007	6	2	A		43249-8909	8	10	A	B	F		TRAY

FLANGELESS (UNSHIELDED)			
ASSEMBLY ITEM NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION
43249-8101	8	10	A
43249-8102	8	10	B
43249-8104	8	8	A
43249-8105	8	8	B
43249-8116	8	6	A
43249-8119	8	4	A
43249-6101	6	6	A
43249-6104	6	4	A
43249-6107	6	2	A

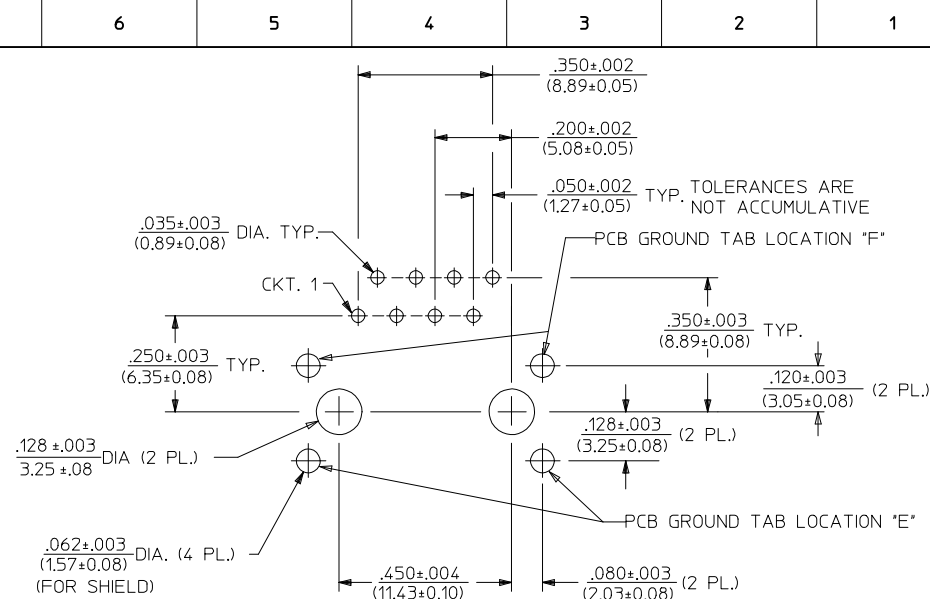
FLANGELESS (UNSHIELDED)			
(SHIPPED IN TUBES)			
43249-6501	6	6	A
43249-6504	6	4	A

SHIELDED, .007" THICK						
ASSEMBLY ITEM NUMBER	CONN. SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION	SIDE/TOP PANEL GROUND TAB OPTION	PCB GROUND TAB OPTION	PACKAGING OPTION
43249-8900	8	10	A	A	E	TRAY
43249-8901	8	10	A	B	E	TRAY
43249-8902	8	10	A	C	E	TRAY
43249-8903	8	10	A	D	E	TRAY
43249-8908	8	10	A	A	F	TRAY
43249-8909	8	10	A	B	F	TRAY
43249-8910	8	10	A	C	F	TRAY
43249-8911	8	10	A	D	F	TRAY
43249-8916	8	8	A	A	E	TRAY
43249-8917	8	8	A	B	E	TRAY
43249-8918	8	8	A	C	E	TRAY
43249-8919	8	8	A	D	E	TRAY
43249-8920	8	8	B	A	E	TRAY
43249-8924	8	8	A	A	F	TRAY
43249-8925	8	8	A	B	F	TRAY
43249-8926	8	8	A	C	F	TRAY
43249-8927	8	8	A	D	F	TRAY

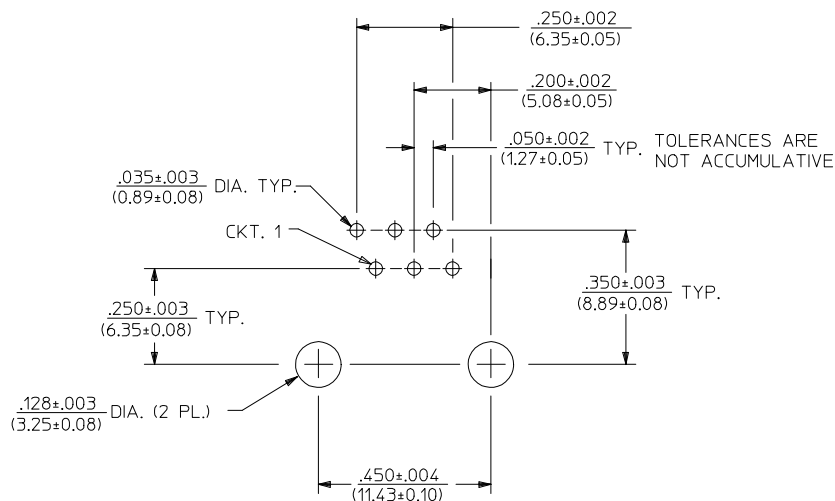
SEE SHEET 1	EC NO: UCP2009-0740	DRWN: JKL01STEME 08/08/09/29	CHKD: JBELL 08/08/10/03	APPR: FSWITH 08/08/10/03	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY																												
						 =0  =0	<table><tr><td></td><td>mm</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± .010</td></tr><tr><td>2 PLACES</td><td>± 0.25</td><td>± ---</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr></table>		mm	INCH	4 PLACES		± ---	± ---	3 PLACES	± ---	± .010	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	<table><tr><td>DRAWN BY</td><td>DATE</td></tr><tr><td>JTR</td><td>1993/06/23</td></tr><tr><td>CHECKED BY</td><td>DATE</td></tr><tr><td>JTR</td><td>1993/06/23</td></tr><tr><td>APPROVED BY</td><td>DATE</td></tr><tr><td>RAS</td><td>1993/06/23</td></tr></table>	DRAWN BY	DATE	JTR	1993/06/23	CHECKED BY	DATE	JTR	1993/06/23	APPROVED BY	DATE	RAS	1993/06/23	4:1	INCH		MOLEX MOLEX INCORPORATED
		mm	INCH																																					
	4 PLACES	± ---	± ---																																					
	3 PLACES	± ---	± .010																																					
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RAS	1993/06/23																																							
							ANGULAR ±1/2°	MATERIAL NO.	DOCUMENT NO.																															
							DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART		SDA-43249																														
								SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																															



PC BOARD LAYOUT FOR SIZE 8, 10 CIRCUIT
(COMPONENT SIDE OF BOARD)



PC BOARD LAYOUT FOR SIZE 8, 8 CIRCUIT
(COMPONENT SIDE OF BOARD)

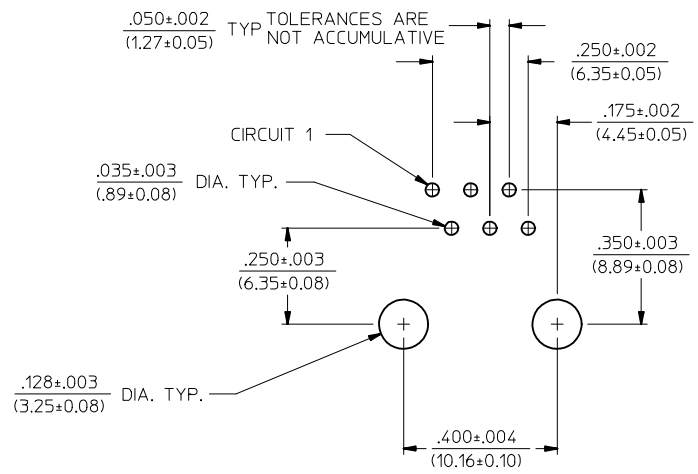


PC BOARD LAYOUT FOR SIZE 8, 6 CIRCUIT
(COMPONENT SIDE OF BOARD)

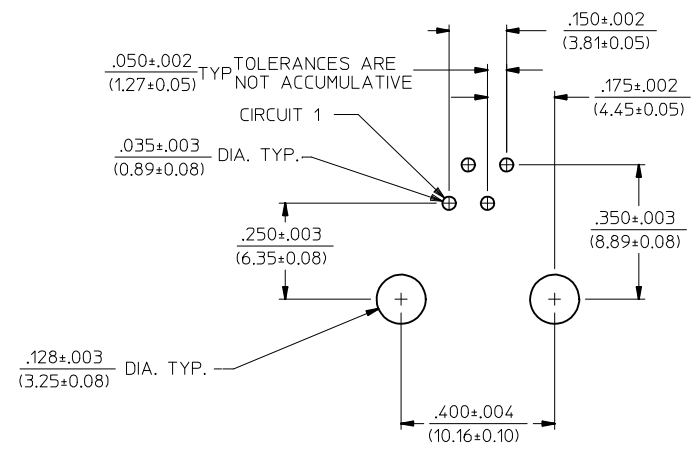
NOTES:
1. RECOMMENDED PCB THICKNESS: .062 ± .005 (1.57 ± 0.13)

SEE SHEET 1 EC NO: UCP2009-0740 DRWN: JLOSTEMEIER 2008/09/29 CHKD: J.BELL 2008/10/03 APPR: FSMITH 2008/10/03	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY	
					mm	INCH	DRAWN BY JTR	DATE 1993/06/23	MATERIAL NO.			
				4 PLACES	± ---	± ---	CHECKED BY JTR	DATE 1993/06/23	DOCUMENT NO.			
				3 PLACES	± ---	± .010	APPROVED BY	DATE	SHEET NO.			
				2 PLACES	± 0.25	± ---	RAS	1993/06/23	5 OF 6			
				1 PLACE	± ---	± ---	ANGULAR ±1/2°		SEE SHEET 4			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
						C						

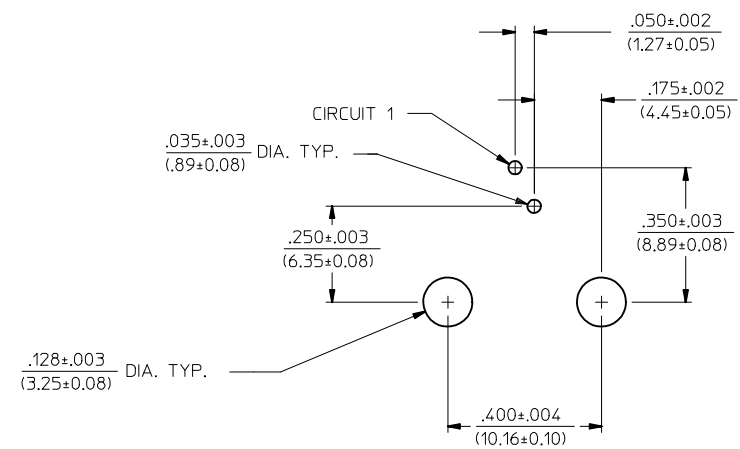
13 12 11 10 9 8 7 6 5 4 3 2 1



PC BOARD LAYOUT FOR SIZE 6, 6 CIRCUIT
(COMPONENT SIDE OF BOARD)



PC BOARD LAYOUT FOR SIZE 6, 4 CIRCUIT
(COMPONENT SIDE OF BOARD)



PC BOARD LAYOUT FOR SIZE 6, 2 CIRCUIT
(COMPONENT SIDE OF BOARD)

NOTES:
1. RECOMMENDED PCB THICKNESS: .062±.005/(1.57±0.13)

SEE SHEET 1 EC NO: UCP2009-0740 DRWN: KLOSTEWIEC 2008/09/29 CHKD: J.BELL 2008/10/03 APPR: FSMITH 2008/10/03 K1	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	
				4 PLACES 3 PLACES 2 PLACES 1 PLACE ANGULAR ±1/2°	mm	INCH	DRAWN BY JTR	DATE 1993/06/23	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY		
					± ---	± ---	CHECKED BY	DATE			
					± ---	± .010	JTR	1993/06/23			
					± 0.25	± ---	APPROVED BY	DATE			
					± ---	± ---	RAS	1993/06/23			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.			SHEET NO.
						SEE SHEET 4		SDA-43249			6 OF 6
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

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<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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