

Excellent Integrated System Limited

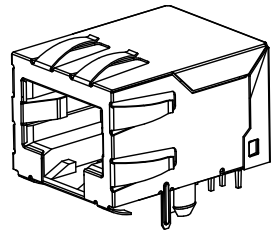
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)
[43202-8916](#)

For any questions, you can email us directly:

sales@integrated-circuit.com



SHIELDED MODULAR JACK
SHOWN WITH PANEL GROUND
OPTION 'D' AND FRONT
PCB GROUND TABS.

NOTES:

1) MATERIAL:

HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: SEE SHEETS 5 AND 6
INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: SEE SHEETS 5 AND 6
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.
*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.

SHIELD:

100 MICROINCHES / 2.54 MICROMETERS NICKEL OVER 50 MICROINCHES / 1.27
MICROMETERS COPPER UNDERPLATE PCB GROUND TABS DIPPED IN TIN

3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43202.

4) PACKAGING SPECIFICATION:

UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS
PER MOLEX PACKAGING SPECIFICATION PK-43202-003.
UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN TUBES
PER MOLEX PACKAGING SPECIFICATION PK-43202-005.
SHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS
PER MOLEX PACKAGING SPECIFICATION PK-43202-004.

5) SEE SHEETS 7 - 9 FOR P.C. BOARD LAYOUTS.

6) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.

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

DRAWING LEGEND

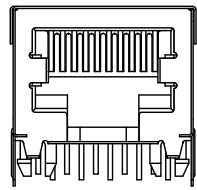
SHEET 1- NOTES, DRAWING LEGEND
SHEET 2- SHIELDED MODULAR JACK W/ BOTTOM GROUND TABS
SHEET 3- SHIELDED MODULAR JACK W/O BOTTOM GROUND TABS
SHEET 4- UNSHIELDED MODULAR JACK
SHEET 5- PART NUMBER CHARTS
SHEET 6- PART NUMBER CHARTS
SHEET 7- FOOTPRINT LAYOUT FOR 4 POSITION HOUSING
SHEET 8- FOOTPRINT LAYOUT FOR 6 POSITION HOUSING
SHEET 9- FOOTPRINT LAYOUT FOR 8 POSITION HOUSING

ADD VIEWS EC NO: UCP202-2472 DRAWING NO: 2012/02/09 CHKD: JELL APPR: SMITH 2012/02/09	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION
		 =0  =0  =0		mm INCH	DRAWN BY JTR	DATE 1993/03/31	TITLE ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY		
			4 PLACES	$\pm .005$	$\pm .010$	CHECKED BY JTR	DATE 1993/03/31	 MOLEX INCORPORATED	
			3 PLACES	$\pm .005$	$\pm .010$	APPROVED BY	DATE		
			2 PLACES	$\pm .025$	$\pm .014$	F SMITH	2012/02/09		
		1 PLACE	$\pm .036$	$\pm .014$					
L5	REV		ANGULAR $\pm 1/2^\circ$		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHTS 5&6	SDA-43202	1 OF 9			
					SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

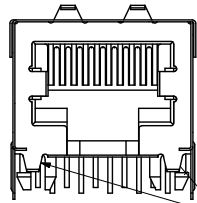
SHIELDED MODULAR JACK W/BOTTOM GROUND TABS

SIZE 8 LOADED 10 VERSION SHOWN

SIDE/TOP GROUND TAB OPTIONS FOR SHIELDS



OPTION "A"
NO TOP OR SIDE TABS

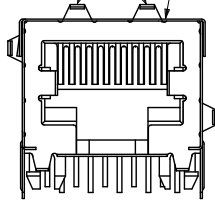


OPTION "B"
TOP TABS

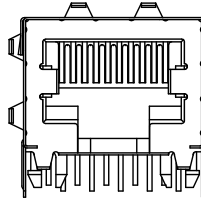
BOTTOM
GROUND TABS

OPTIONAL TOP GROUND TABS

SHIELDED MODULAR JACK ASSEMBLY
SEE SHEET 5 FOR MATERIAL NO.

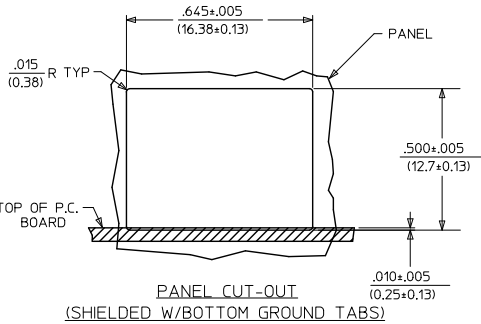


OPTION "C"
TOP AND STAGGERED SIDE TABS

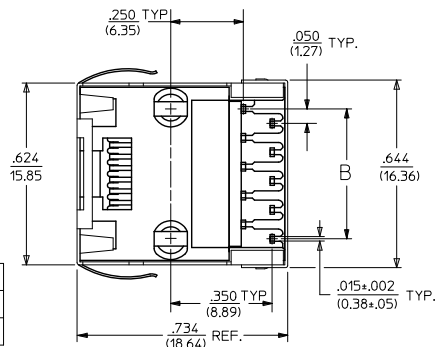
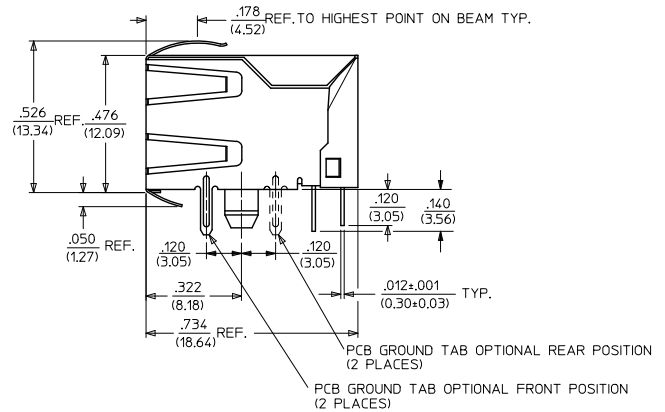


OPTION "D"
TOP AND SIDE TABS

OPTIONAL SIDE
GROUND TABS
(2 PLACES)



HOUSING SIZE	CIRCUIT SIZE	B
8	10	.450±.005 11.43±.13
8	8	.350±.005 8.89±.13

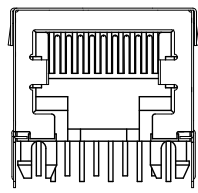


GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
		mm	INCH	IN/MM	DATE	INCH	INCH		
4 PLACES ±---		±---	±---	JTR	1993/03/31				
3 PLACES ±---		±.010	±.010	CHECKED BY	DATE				
2 PLACES ±0.25		±.014	±.014	JTR	1993/03/31				
1 PLACE ±0.36		±---	±---	APPROVED BY	DATE				
ANGULAR ±1/2°		±---	±---	FSMITH	2012/02/09				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 5		MATERIAL NO.		DOCUMENT NO.			

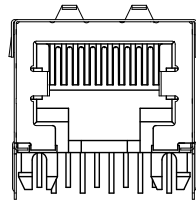
SHIELDED MODULAR JACK W/O BOTTOM GROUND TABS

SIZE 8, LOADED 10 VERSION SHOWN

SIDE/TOP GROUND TAB OPTIONS FOR SHIELDS



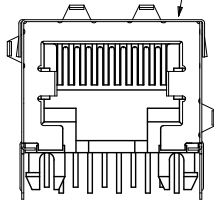
OPTION "E"
NO TOP OR SIDE TABS



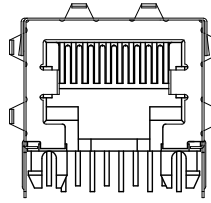
OPTION "F"
TOP TABS

OPTIONAL TOP GROUND TABS

SHIELDED MODULAR JACK ASSEMBLY
SEE SHEET 6 FOR MATERIAL NO.

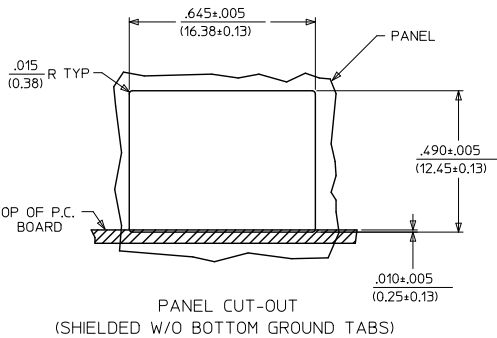


OPTION "G"
TOP AND STAGGERED SIDE TABS



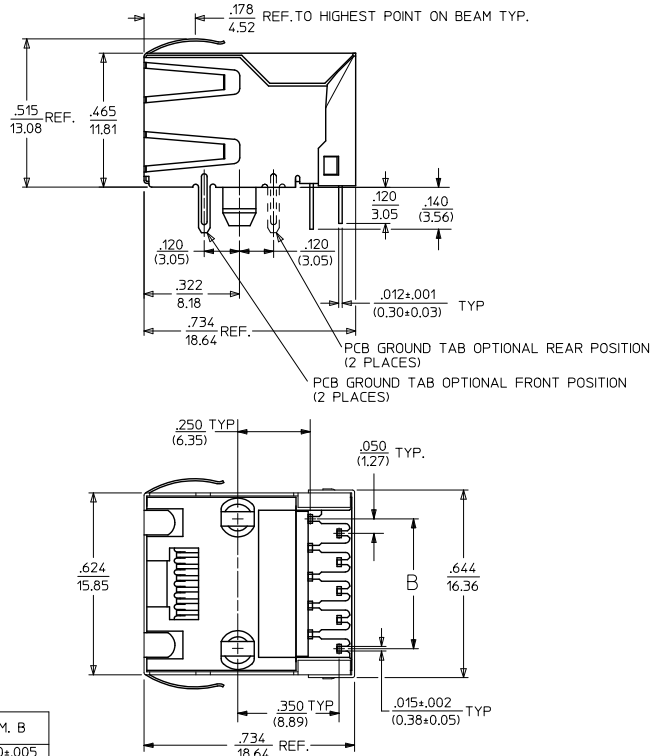
OPTION "H"
TOP AND SIDE TABS

OPTIONAL SIDE
GROUND TABS
(2 PLACES)

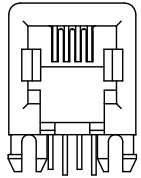


PANEL CUT-OUT
(SHIELDED W/O BOTTOM GROUND TABS)

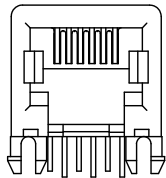
HOUSING SIZE	CIRCUIT SIZE	DIM. B
8	10	.450±.005 (11.43±0.13)
8	8	.350±.005 (8.89±0.13)



SEE SHEET 1 EC NO: UCP2012-2472 DRAWING CHKD: JELL CHKD: BELL APPR: JELL	2012/02/03	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS		THIRD ANGLE PROJECTION	
	2012/02/03					IN/MM		4:1	INCH			
	2012/02/09			mm	INCH	DRAWN BY	DATE	TITLE ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY				
			▽=0	4 PLACES ±	±---	JTR	1993/03/31					
			▽=0	3 PLACES ±	±---	CHECKED BY	DATE	MOLEX INCORPORATED				
			▽=0	2 PLACES ±	±.010	JTR	1993/03/31					
				1 PLACE ±	±.014	APPROVED BY	DATE	MATERIAL NO. SEE SHEET 6 DOCUMENT NO. SDA-43202 SHEET NO. 3 OF 9				
				1 PLACE ±	±.036	FSMITH	2012/02/09					
				ANGULAR ±1/2°								
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								



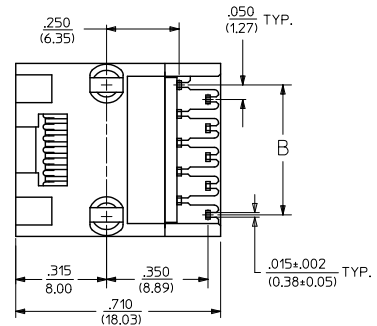
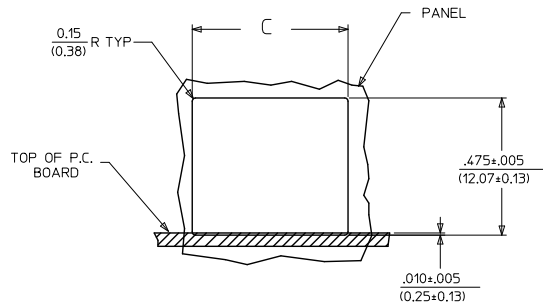
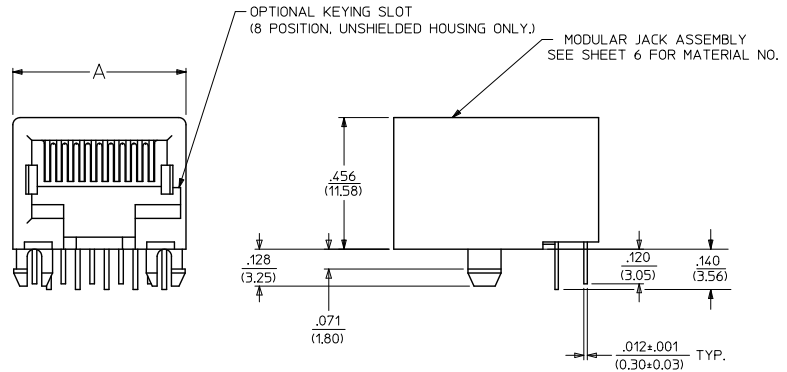
SIZE 4
LOADED 4 SHOWN



SIZE 6
LOADED 6 SHOWN

UNSHIELDED MODULAR JACKS

SIZE 8, LOADED 10 SHOWN



HOUSING SIZE	LOADED CIRCUITS	A	B	C
4	4	.440 (11.18)	.150±.005 (3.81±0.13)	.460±.005 (11.68±0.13)
4	2	.440 (11.18)	.050±.005 (1.27±0.13)	.460±.005 (11.68±0.13)
6	6	.520 (13.21)	.250±.005 (6.35±0.13)	.540±.005 (13.72±0.13)
6	4	.520 (13.21)	.150±.005 (3.81±0.13)	.540±.005 (13.72±0.13)
6	2	.520 (13.21)	.050±.005 (1.27±0.13)	.540±.005 (13.72±0.13)
8	10	.600 (15.24)	.450±.005 (11.43±0.13)	.620±.005 (15.75±0.13)
8	8	.600 (15.24)	.350±.005 (8.89±0.13)	.620±.005 (15.75±0.13)
8	6	.600 (15.24)	.250±.005 (6.35±0.13)	.620±.005 (15.75±0.13)
8	4	.600 (15.24)	.150±.005 (3.81±0.13)	.620±.005 (15.75±0.13)
8	2	.600 (15.24)	.050±.005 (1.27±0.13)	.620±.005 (15.75±0.13)

REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			mm	INCH	IN/MM	DATE			
1	4 PLACES ±.005	▽=0	±.005	±.005	JTR	1993/03/31	4:1	INCH	THIRD ANGLE PROJECTION
2	3 PLACES ±.010	▽=0	±.010	±.010	JTR	1993/03/31			
3	2 PLACES ±.025	▽=0	±.025	±.014	JTR	1993/03/31			
4	1 PLACE ±.036	▽=0	±.036	±.014	JTR	1993/03/31			
5	ANGULAR ±1/2°	▽=0	±1/2°	±1/2°	JTR	1993/03/31			
6	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	▽=0			JTR	1993/03/31			
7	SEE SHEET 6	▽=0			JTR	1993/03/31			
8	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	▽=0			JTR	1993/03/31			

SHIELDED MODULAR JACKS W/BOTTOM GROUND TABS (SHEET 2)

ASSEMBLY MATERIAL NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	SIDE/TOP PANEL GROUND TAB OPTION	PCB GROUND TAB OPTION	TERMINAL PLATING OPTION	PACKAGING OPTION	HOUSING COLOR
43202-8900	8	10	A	FRONT POSITION	A	TRAY	BLACK
43202-8901	8	10	B	FRONT POSITION	A	TRAY	
43202-8902	8	10	C	FRONT POSITION	A	TRAY	
43202-8903	8	10	D	FRONT POSITION	A	TRAY	
43202-8908	8	10	A	REAR POSITION	A	TRAY	
43202-8909	8	10	B	REAR POSITION	A	TRAY	
43202-8910	8	10	C	REAR POSITION	A	TRAY	
43202-8911	8	10	D	REAR POSITION	A	TRAY	
43202-8916	8	8	A	FRONT POSITION	A	TRAY	
43202-8917	8	8	B	FRONT POSITION	A	TRAY	
43202-8918	8	8	C	FRONT POSITION	A	TRAY	
43202-8919	8	8	D	FRONT POSITION	A	TRAY	
43202-8924	8	8	A	REAR POSITION	A	TRAY	
43202-8925	8	8	B	REAR POSITION	A	TRAY	
43202-8926	8	8	C	REAR POSITION	A	TRAY	
43202-8927	8	8	D	REAR POSITION	A	TRAY	

SEE SHEET 1 EC NO: UCP202-2472 DRAWING NO: 2012/02/09 CHKD: JELL APPR: SMITH L5	2012/02/03	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
	2012/02/03		mm	INCH	DRAWN BY	DATE	TITLE	ULTRA LOW PROFILE	
	2012/02/09		4 PLACES ± --- ± ---	JTR	1993/03/31	RIGHT ANGLE MODULAR JACK			
			3 PLACES ± --- ± .010	CHECKED BY	DATE	ASSEMBLY			
			2 PLACES ± 0.25 ± .014	JTR	1993/03/31				
			1 PLACE ± 0.36 ± ---	APPROVED BY	DATE	MOLEX INCORPORATED			
			ANGULAR ± 1/2°	FSMITH	2012/02/09				
				MATERIAL NO.	DOCUMENT NO.				
				SEE CHART		SDA-43202		SHEET NO.	
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				5 OF 9	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

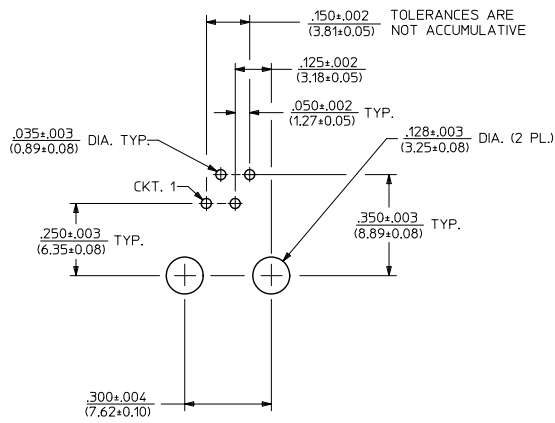
SHIELDED MODULAR JACKS W/O BOTTOM GROUND TABS (SHEET 3)

ASSEMBLY MATERIAL NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	SIDE/TOP PANEL GROUND TAB OPTION	PCB GROUND TAB OPTION	TERMINAL PLATING OPTION	PACKAGING	HOUSING COLOR
43202-8800	8	10	E	FRONT POSITION	A	TRAY	BLACK
43202-8801	8	10	F	FRONT POSITION	A	TRAY	
43202-8802	8	10	G	FRONT POSITION	A	TRAY	
43202-8803	8	10	H	FRONT POSITION	A	TRAY	
43202-8808	8	10	E	REAR POSITION	A	TRAY	
43202-8809	8	10	F	REAR POSITION	A	TRAY	
43202-8810	8	10	G	REAR POSITION	A	TRAY	
43202-8811	8	10	H	REAR POSITION	A	TRAY	
43202-8816	8	8	E	FRONT POSITION	A	TRAY	
43202-8817	8	8	F	FRONT POSITION	A	TRAY	
43202-8818	8	8	G	FRONT POSITION	A	TRAY	
43202-8819	8	8	H	FRONT POSITION	A	TRAY	
43202-8824	8	8	E	REAR POSITION	A	TRAY	
43202-8825	8	8	F	REAR POSITION	A	TRAY	
43202-8826	8	8	G	REAR POSITION	A	TRAY	
43202-8827	8	8	H	REAR POSITION	A	TRAY	

UNSHIELDED MODULAR JACKS- (SHEET 4)

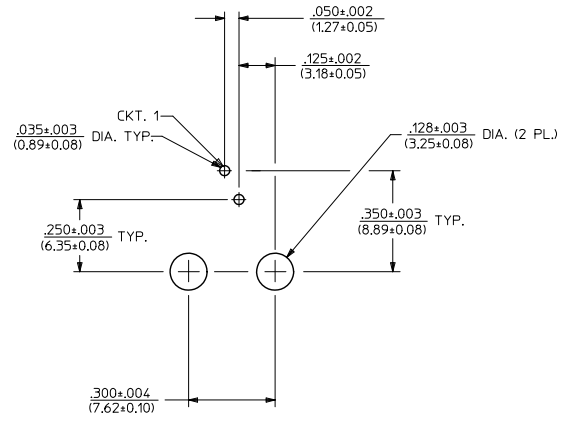
ASSEMBLY MATERIAL NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION	KEYING OPTION	PACKAGING OPTION	HOUSING COLOR
43202-4101	4	4	A	NO	TRAY	BLACK
43202-4104	4	2	A	NO	TRAY	
43202-6101	6	6	A	NO	TRAY	
43202-6102	6	6	B	NO	TRAY	
43202-6104	6	4	A	NO	TRAY	
43202-6105	6	4	B	NO	TRAY	
43202-6107	6	2	A	NO	TRAY	
43202-6110	6	6	B	NO	TUBE	
43202-6113	6	2	A	NO	TRAY	ORANGE
43202-6116	6	2	A	NO	TRAY	GREEN
43202-8101	8	10	A	NO	TRAY	BLACK
43202-8104	8	8	A	NO	TRAY	
43202-8105	8	8	B	NO	TRAY	
43202-8113	8	8	A	YES	TRAY	
43202-8116	8	6	A	NO	TRAY	
43202-8119	8	4	A	NO	TRAY	
43202-8122	8	2	A	NO	TRAY	
43202-8125	8	8	A	NO	TRAY	BLUE
43202-8504	8	8	A	NO	TUBE	BLACK
43202-8513	8	8	A	YES	TUBE	

SEE SHEET 1 EC NO: UCP202-2472 DRAWING NO: 2012/02/09 CHKD: JELL APPR: SMITH L5	2012/02/03	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±--- ±.010 2 PLACES ±.25 ±.014 1 PLACE ±.36 ±--- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE JTR 1993/03/31 CHECKED BY DATE JTR 1993/03/31 APPROVED BY DATE FSMITH 2012/02/09	SCALE 4:1 DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	TITLE ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY MOLEX INCORPORATED	MATERIAL NO. SDA-43202	DOCUMENT NO.	SHEET NO. 6 OF 9
	2012/02/03									
	2012/02/09									
	2012/02/09									
	2012/02/09									
	2012/02/09									
	2012/02/09									
	2012/02/09									
	2012/02/09									
	2012/02/09									
DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									
REV	SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									



PC BOARD LAYOUT FOR 4 POSITION HOUSING

(4 CIRCUIT FOOT PRINT SHOWN)
(COMPONENT SIDE OF BOARD)

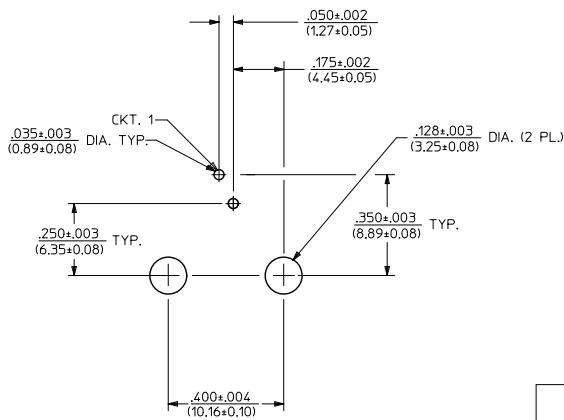
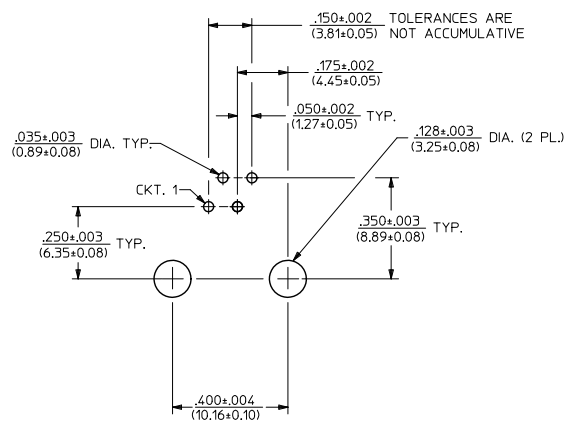
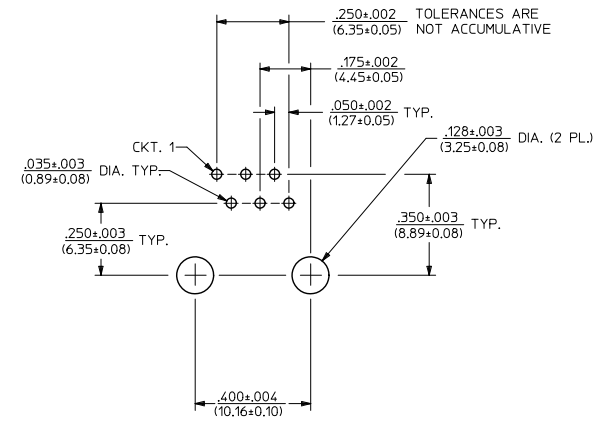


PC BOARD LAYOUT FOR 4 POSITION HOUSING

(2 CIRCUIT FOOT PRINT SHOWN)
(COMPONENT SIDE OF BOARD)

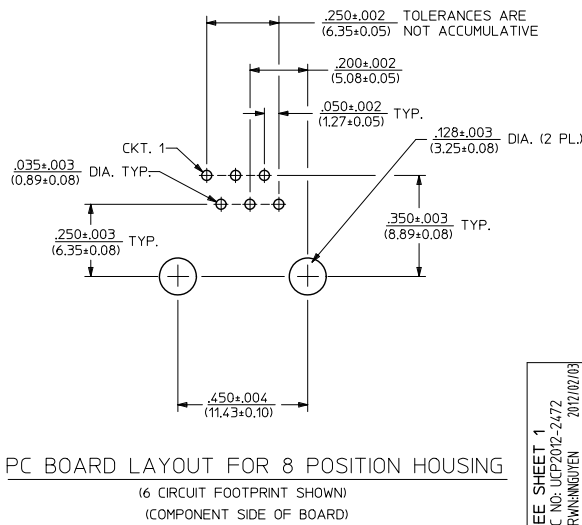
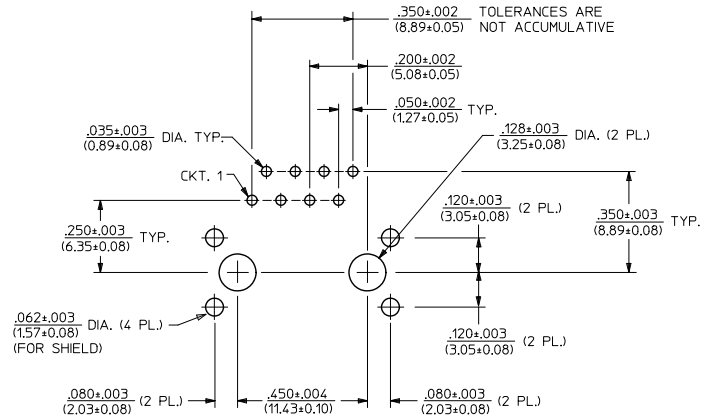
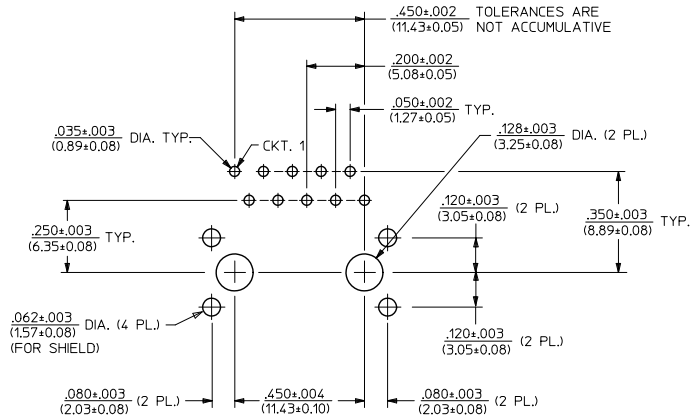
NOTES:
1. RECOMMENDED PCB THICKNESS: .062±.005/(1.57±0.13)

SEE SHEET 1 EC NO: UCP2012-2472 DRAWING: 2012/02/09 CHKD: JELL APPR: SMITH 2012/02/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
	▽=0	mm	INCH	DRAWN BY	DATE	TITLE	ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY MOLEX INCORPORATED		
	▽=0	4 PLACES ±.005 ±.005	JTR	1993/03/31	CHECKED BY	DATE			
	▽=0	3 PLACES ±.010 ±.010	JTR	1993/03/31	APPROVED BY	DATE			
	▽=0	2 PLACES ±0.25 ±.014	FSMITH	2012/02/09	DOCUMENT NO.	SHEET NO.			
		1 PLACE ±0.36 ±.014	MATERIAL NO.		SDA-43202		7 OF 9		
	ANGULAR ±1/2°		SEE SHEET 6						
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								



NOTES:
1. RECOMMENDED PCB THICKNESS: .062 $\pm$.005/(1.57 $\pm$ 0.13)

SEE SHEET 1 EC NO: UC2P012-2472 DRAWING NO: 2472 CHKD: JRELL APPR: JRELL	2012/02/03	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	TITLE ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY MOLEX INCORPORATED		
	2012/02/03											
	2012/02/09											
	mm		INCH		DRAWN BY		DATE		TITLE			
	4 PLACES ±		±		JTR		1993/03/31					
	3 PLACES ±		±.010		CHECKED BY		DATE					
	2 PLACES ±		±.014		JTR		1993/03/31					
	1 PLACE ±		0.36 ±		APPROVED BY		DATE					
	ANGULAR ±1/2°				FSMITH		2012/02/09		MOLEX INCORPORATED			
					MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
L5	REV		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE SHEET 6		SDA-43202		8 OF 9	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												



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

SEE SHEET 1 EC NO: UCP2029-2472 DRAWING BY DINGWANGYEN CHKD: BELL APPR: SM TH	2012/02/03	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	2012/02/09			(UNLESS SPECIFIED)		IN/MM		4:1	INCH		
				mm	INCH	DRAWN BY	DATE	TITLE	ULTRA LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY		
				4 PLACES ± .005 ± .0004	JTR	1993/03/31					
				3 PLACES ± .005 ± .010	CHECKED BY	DATE					
				2 PLACES ± 0.25 ± .014	JTR	1993/03/31					
				1 PLACE ± 0.36 ± .014	APPROVED BY	DATE					
				ANGULAR ± 1/2°	FSMITH	2012/02/09		MOLEX INCORPORATED			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
						SEE SHTS 5&6		SDA-43202		9 OF 9	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								