

**54602-908LF - Modular Jack  
: Cat 3 Single Modular Jack,  
Horizontal, Board Through  
Mount, 8P8C, 1 Port**



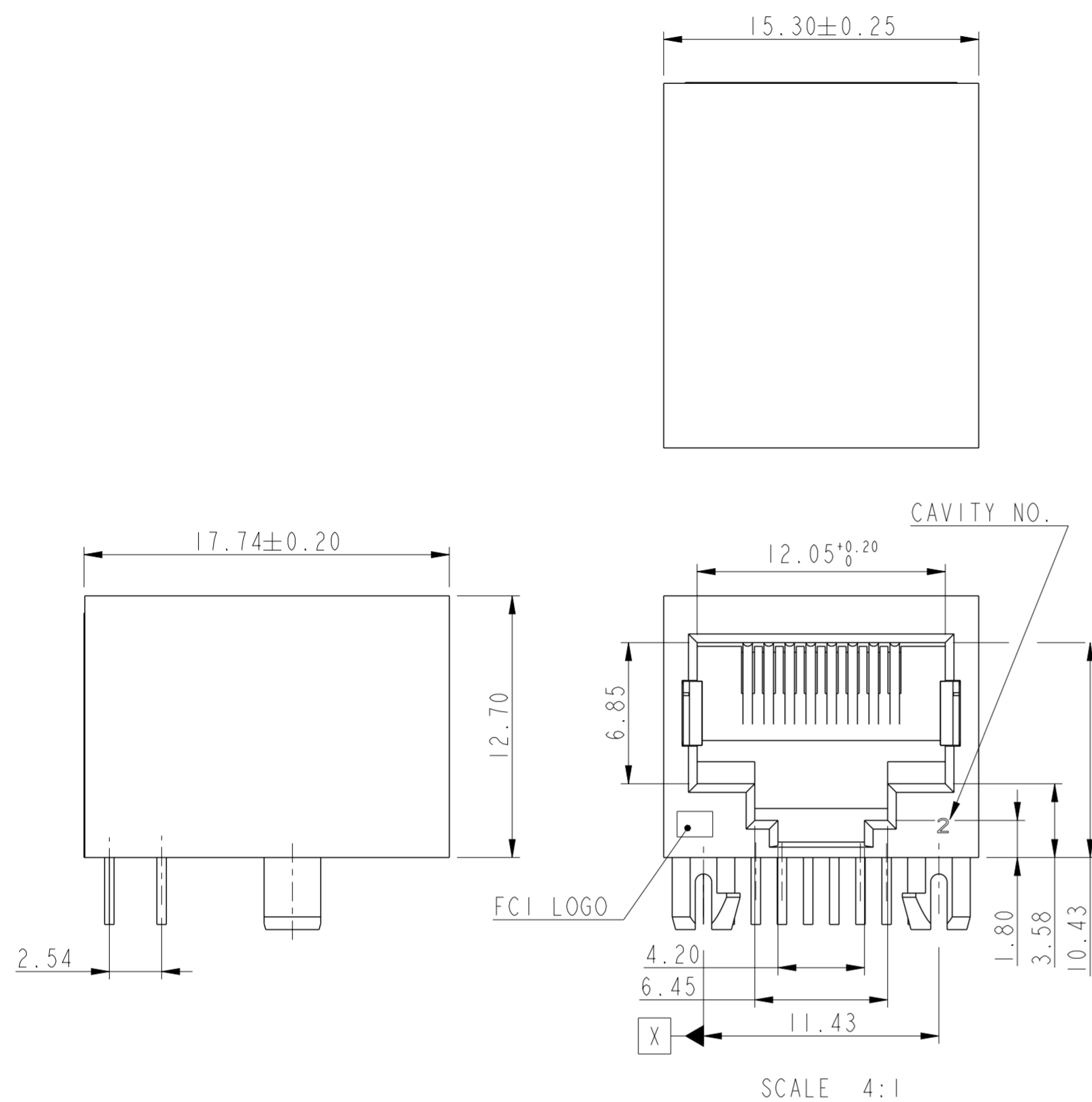
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## Specifications

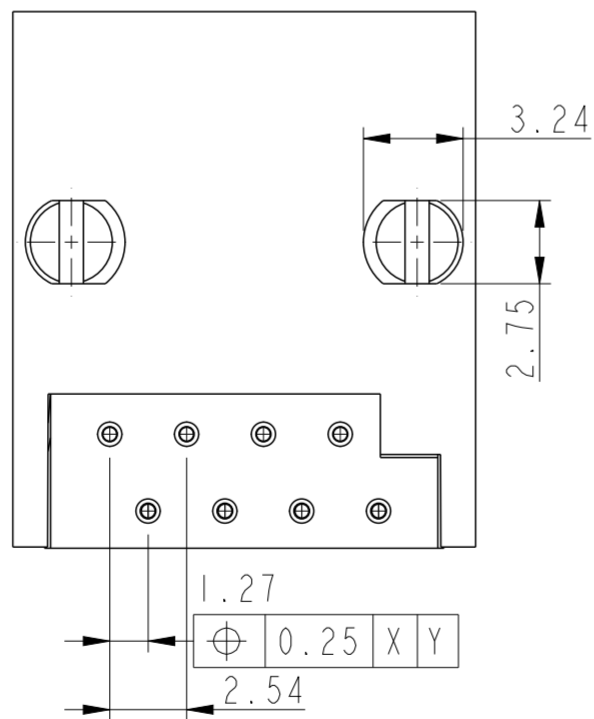
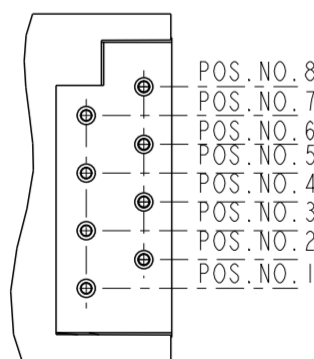
<b>General</b>	
Keyed	No
Location Peg	Snap
Number of contacts	8
Number of contacts (Loaded)	All
Number of Ports	1
Orientation	Horizontal
Panel Stops	No
Performance Category	CAT3
Product Style	Single
Shield (Style)	None
Shielded	No
Mating half	mates with Modular Plugs conforming to FCC Part 68, Subpart F
Series Number	54602
<b>Dimensional</b>	
Height (Above board)	Low Profile
Length (Tail)	3.25 mm
Thickness (Board)	1.6 mm (0.063 in.)
<b>Electrical</b>	
Attenuation	0.4 dB max. at 16 MHz
Crosstalk loss	34 dB at 16 Mhz
Current rating	+30°C with all Contacts powered at 1A
Resistance (Contact)	20 milli ohms max. per EIA 36423
Resistance (Insulation)	500 M-ohms min.
Return Loss	0.07 max. to 20 Mhz, 0.2 max. to 100 Mhz
Voltage rating	1000 volts signal to signal AC or DC
<b>Mechanical</b>	
Durability (Mating cycles)	250 Cycles
Mating force	20N max.
Retention force	22.5N (5 lbf)
<b>Mounting</b>	

<b>Ground tabs</b>	None
<b>Mounting ears</b>	No
<b>Mounting style</b>	Board Through Mount
<b>Solder process</b>	Wave
<b>Physical</b>	
<b>Color (Housing)</b>	Black
<b>Material (Contact)</b>	Copper Alloy
<b>Material (Housing)</b>	PBT
<b>Plating (Contact)</b>	0.38 µm (15 µin.) Gold over Nickel
<b>Underplating (Contact)</b>	1.27 µm (50 µin.) Nickel
<b>Flammability rating</b>	meets UL94
<b>Approvals / Certifications</b>	
<b>Approvals / Certifications</b>	UL Approved
<b>Other Features</b>	
<b>Most Popular Configuration</b>	Not Applicable
<b>Options (Miscellaneous)</b>	Housing height 12.7 mm (0.5 in.)
<b>Packaging (Type)</b>	Corrugated Honey comb box

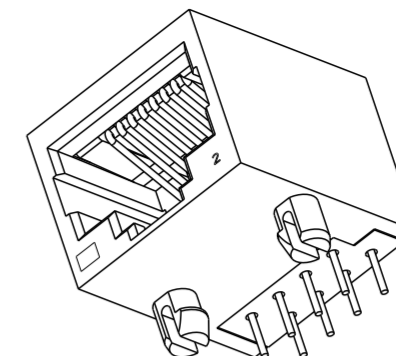
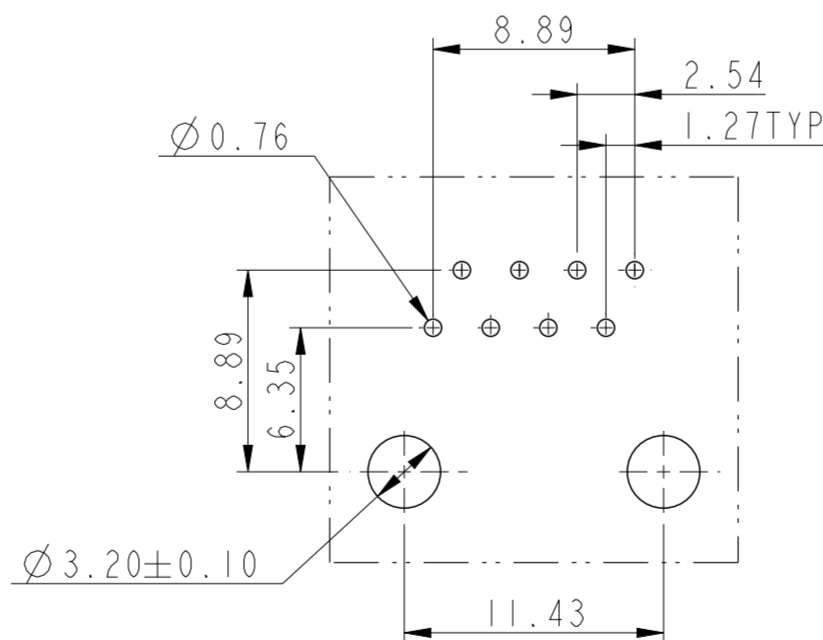
A  
B  
C  
D  
E  
F



WIRE POSITION NO.



P.C.B. HOLE PATTERN VIEWED FROM TOP



SCALE 2:1

PRODUCT NO. 54602-X08 XXX LF

SHALLOW LATCH SERIES

LEAD FREE

PLATING CODE	
2	0.076 $\mu$ Au Selective
3F	0.15 $\mu$ Au
6	0.76 $\mu$ Au Selective
7	Au Flash Selective
8	1.27 $\mu$ Au Selective
9	0.38 $\mu$ Au Selective
9F	0.38 $\mu$ Au

CONTACTS LOADED	
BLANK-CTS	LOADED IN ALL POS.
001-CTS	LOADED IN POS. 4 & 5

#### TECHNICAL SPECIFICATION:

Insulation Resistance - 500 M Ohms min.  
Dielectric Strength - 1000 V rms , 60 Hz.  
Contact Resistance - 20 mOhms. max.  
Current Rating - 1.5 amp DC  
Maximum Total Mating Force - 35 N  
Retention Force Between Plug & Jack-22.5 N min.  
Durability - 250 Cycles Min. except Plating Code 2 & 7  
Temperature Range -40/+70°C

#### MATERIAL

-Housing: Glassfilled Polyester-UL94 V0 BLACK

The housing will withstand exposure to 260-265°C for 5 seconds in a wavesoldering application. Use protective adhesive tape (Kapton or Teflon) or protective metallic devices on the areas which are directly exposed to wave soldering as it is used in classical leaded wave soldering.

-Contact:  $\phi 0.46$ mm Copper Alloy

#### Plating:

Active zone: Gold over nickel on contact area  
Termination zone : Matte Tin over nickel except for XF plating codes.

1. LF Products meet European Union Directives and other country Regulations as described in GS-47-0004.
2. The Housing will withstand exposure to 260°C peak temperature for 5 sec in a wave solder application with a 1.6mm Min thick circuit board. Slight deformation of snap pegs may occur at 260-260°C which will not affect the function of the product.
3. Lead Free or ROHS Directive labelling to be provided as per GS-14-920 for Lead Free version.

NOTES:  
1. ALL WIRES MUST BE CONTAINED IN THE SHELF.

spec ref	dr	P-Mathew Nebu	2011/05/26	projection	mm	size	A2	scale	3:1
tolerance std	eng	P-Mathew Nebu	2012/08/30	chr	-	ecn no	ELX-012613-1	rel level	Released
	appr	K-Paul Biju	2012/08/30	product family	MODJACK	rel level	Released		
surface	linear	0.X	$\pm 0.3$	title	8 POL SHALLOW LATCH CONNECTOR	dwg no	C-BMJ-0102	rev	J
		0.XX	$\pm 0.15$	www.fci.com	cat. no.	54602	Product - Customer Drw	sheet 1 of 1	
		0.XXX	$\pm 0.05$						
	angular	0°	$\pm 1^\circ$						

PDS: Rev :J

STATUS: Released

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