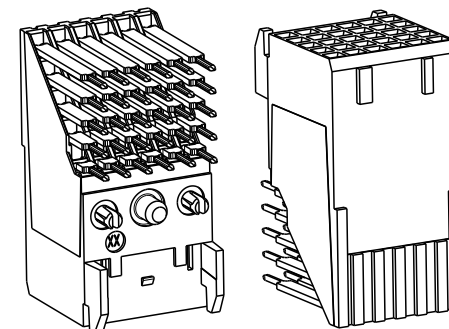
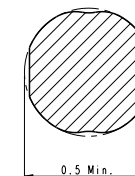


PRODUCT NUMBER	MATING PERFORMANCE LEVEL
52048-101(LF)	STANDARD P/N - TELCORDIA CO Compatible
52048-301(LF)	CUSTOMER SPECIFIC
52048-E01(LF)	CUSTOMER SPECIFIC



SCALE 5:1



SECTION P-P  
SCALE 100:1

1. Housing material: Liquid Crystal Polymer 30% glass, flame retardant according to UL 94-V0. Contact material phosphor bronze.
2. All solder surfaces are tin or tin-alloy plated.
3. Product marking on indicated surface: part number and manufacturing code. It will not prevent picking up with a vacuum device.
4. Center of gravity at indicated point. Mass of product 5.57 g.
5. Maximum mounting force per connector 20N on bare board.
6. This dimension shows maximum position of the centre of the vacuum nozzle. Recommended position is 9.5 mm in line with the pegs.
7. The connector is tape-and-reel packed according to GS-14-626, which follows the EIA-18B. Tape width 44 mm, cavity pitch 20 mm. The tape has recesses at the sides for the use of gripper.
8. Product specification according to GS-12-215.
9. For pin-in-paste recommendations, see sheet 2 and application guide GS-20-024.

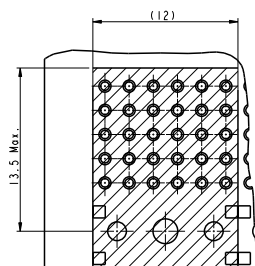
- The "LF" products meet European Union Directives and other country regulations as described in GS-22-008.
- The housing will withstand exposure to 260°C peak temperature for 30 seconds in a convection, infra-red or vapor reflow oven. See Application notes/procedures if they are available.
- Termination plating spec: 1.27  $\mu\text{m}$  Nickel mini , 2.5 to 7.5  $\mu\text{m}$  Sn (pure matte)
- Packaging spec: see GS-14-920

Material		-	Spec ref		tolerance	projection		mm
Mat code		-	surface	✓	ISO 408	ISO 101		
Heat treated		-			ISO 1302			
Plating/Finish		-						
Part	sec no	date	Dr P. Poorler	2002/04/22			size	Scale
A	20161	2002/07/23	Dr P. Patters	2002/04/22	Product name	52049	A1	
A	20161	2002/07/23	Dr P. Patters	2002/04/22	Model name	52049	ECN	ISO 10111
A	20161	2002/07/23	Asst P. Patters	2002/04/22	Model Revision	7	REL Level	RELEASE
5x6 RA Assy					52049C			
Signal RCP PIP								
Part list					material	customer code	sheet 1 of 2	



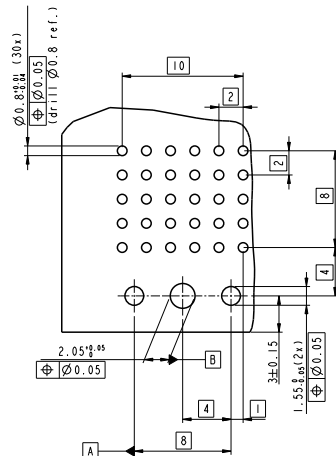
All items mentioned on this sheet are recommendations of FCI and should be seen as indication. The final responsibility for the application process is at the customer.

### PCB LAYOUT: BOARD AREA



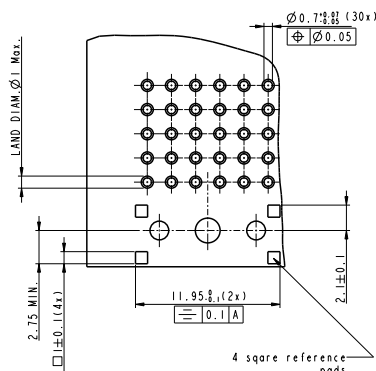
### PCB LAYOUT: HOLE PATTERN

PCB thickness 1.4 - 2.6 mm.



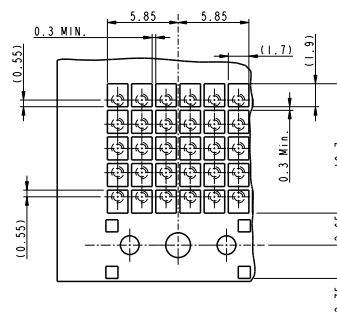
### PCB LAYOUT: PLATING

Plating thickness must be constant over the connector area. Copper layer 50 µm max. Solder mask should cover all surfaces under the paste that are not plated. There is no solder mask allowed on the reference pads.



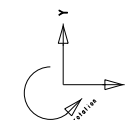
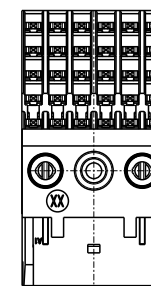
### PCB LAYOUT : SOLDER PASTE

Recommended stencil thickness 0.15 mm. The solder content in the paste should be sufficient, typically 50% volume percentage. The solder tail, PCB, stencil and application process determine the solder result. The squeegee process (angle, speed, pressure, material and number of cycles) must be optimized, so that sufficient solder is available.



### CONNECTOR MOUNTING

The connector can be picked up with a mechanical gripper or a vacuum nozzle. Nozzle diameter 6 - 10 mm. Both metal nozzles or nozzles with seal or rubber can be used. Vacuum pressure 0.6 bar under local ambient pressure. Position of the nozzle on the connector as mentioned on sheet 1. The reference for placing the connector can be determined by video inspection of the connector bottomside. The recesses of the retention pegs are designed for video recognition (shown bold, see sketch below). The line through the center of the recesses is the reference for Y-direction and rotation; datum B. The line through the middle between the center of the recesses perpendicular to the first line is reference for X-direction; datum A.



The acceleration and the deceleration of the mounting head of the pick and place equipment should be restricted in such a way that the connector doesn't fall or slides on the nozzle. An inferior accuracy of the placing equipment can reduce the success rate of mounting. The last movement of the connector must be purely vertical and downwards. The board must be horizontal. The final mounting force must be controlled in such a way that the connector is seated flush to the board and remains there after releasing from the placing device. (Extra) PCB support can be required to meet this. The movement of the PCB-assembly before reflowing must be smooth so that all components remain seated flush on the board.

Material	Spec. ref.	surface	tolerance	projection	mm
Mat. code		ISO 406	ISO 1302	ISO 1101	
Heat treat					
Plating/finish					
Dr. P. Part	2002/04/22	Product family	Metral (17m)	size	A1
Eng. P. Part	020117	Model Name	52049	ECN	LS08-0110
Chr. P. Part	2002/04/22	Model Revision		F. REL Level	RELEASED
App. P. Part	2002/04/23				
5x6 RA Assy					
Signal RCP PIP					
Prof. file	catalog no	metral	customer copy	sheet 2 of 2	