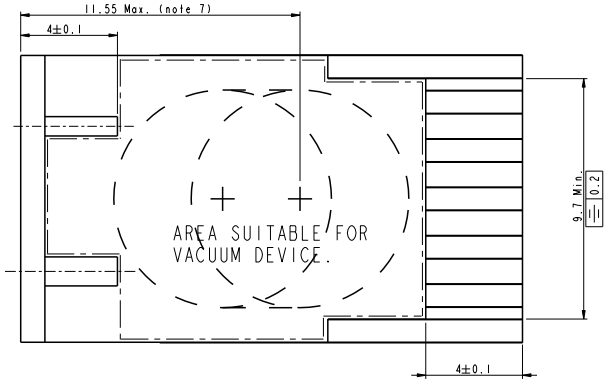
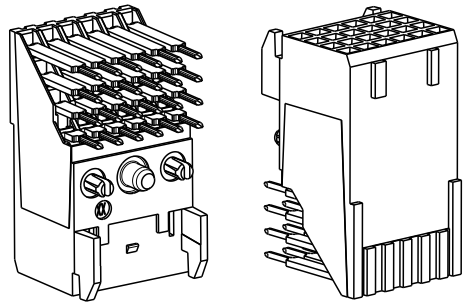
PRODUCT NUMBER	ROW	CONFIGURATION					
		6	5	4	3	2	1
52048-X01(LF)	D	X	X	X	X	X	X
	C	X	X	X	X	X	X
	B	X	X	X	X	X	X
	A	X	X	X	X	X	X

performance level(see table)
loading pattern
Lead Free designation

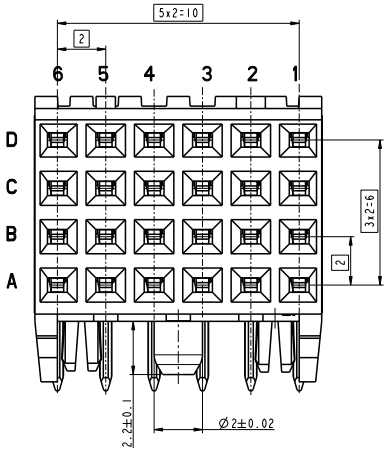
"-" POSITION NOT LOADED
"X" POSITION LOADED

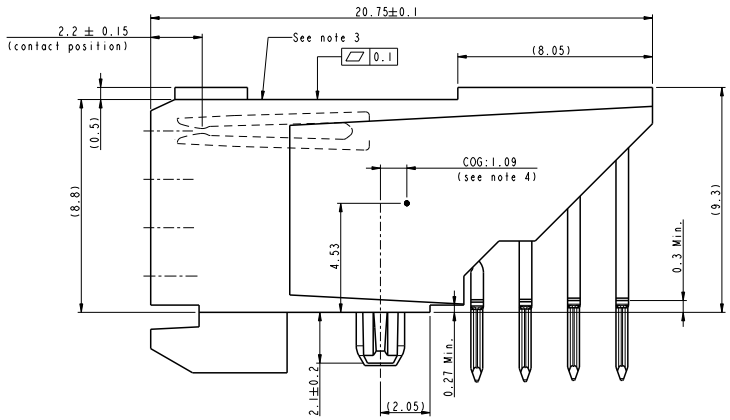
PRODUCT NUMBER	MATING PERFORMANCE
52048-101(LF)	STANDARD P/N - TELCORDIA CO Compatible
52048-301(LF)	CUSTOMER SPECIFIC
52048-E01(LF)	CUSTOMER SPECIFIC

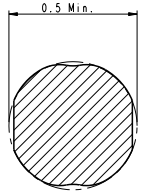




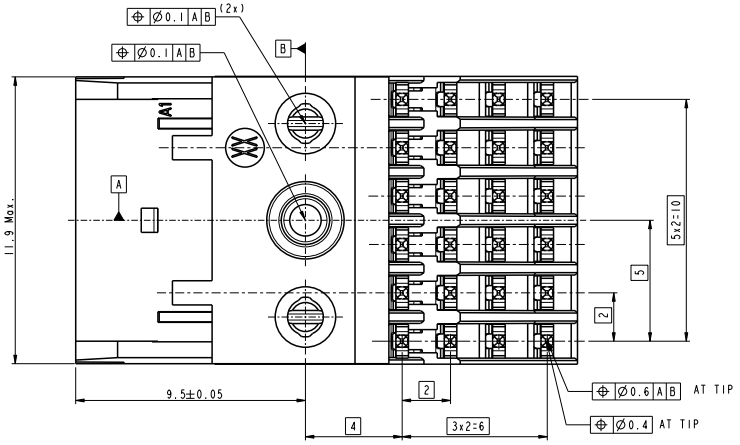
SCALE 5:1







SECTION P-P
SCALE 100:1



NOTES:
1. Housing material: Liquid Cristal 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 4.10 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 EIA-481B.Tape width 44 mm,cavity pitch 20 mm. The tape has recesses at the sides to allow 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.

NOTE: LEAD-FREE AND RoHS INFORMATIONS

- 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 30seconds in a convection, infra-red or vapor reflow oven. See Application notes/procedures if they are available.
- Termination plating spec: 1.27 µm Nickel mini , 2.5 to 7.5 µm Sn (pure matte)
- Packaging spec: see GS-14-920

rev	ecn no	dr	date
A	H20129	PEP	2002/07/18
B	W 20186	PEP	2002/11/19
C	W 30059	PEP	2003/12/08
D	LS 4068	MLE	2004/07/08
E	LS05-002	MLE	2005/06/21
F	LS06-0084	LGO	2006/06/25
G	LS08-0110	MLE	2008/05/07

Material	-	Spec ref	
Mat code	-	surface - ISO 1302	tolerance ISO 406 ISO 1101
Heattreat	-	projection	mm
Plating/Finish	-		
Dr P Poorter	2002/07/15	size A1	Scale 10:1
Eng P Potters	020117	Product family METRAL (TM)	
Chr P Potters	2002/02/14	Model Name 52048	ECN LS08-0110
Appr P Potters	2002/04/19	Model Revision E	REL Level RELEASED
Pro/E file	catalog no	dwg no 52048C	Rev. G
title: 4x6 RA Assy Signal RCP PIP		customer copy	sheet 1 of 2

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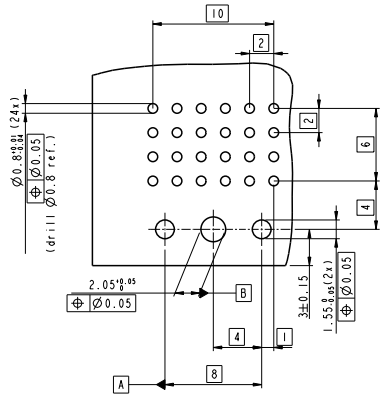
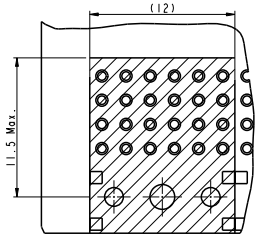
All items mentioned on this sheet are recommendations of FCI and should be seen as indication.
The final responsibility for the application process is at the customer.

PCB LAYOUT: HOLE PATTERN

PCB thickness 1.4 - 2.6 mm.

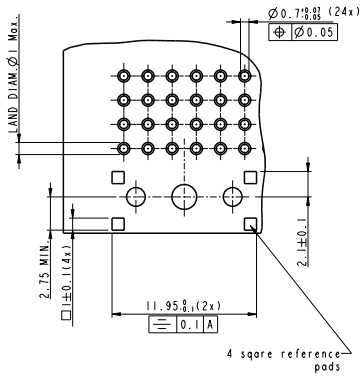


PCB LAYOUT: BOARD AREA



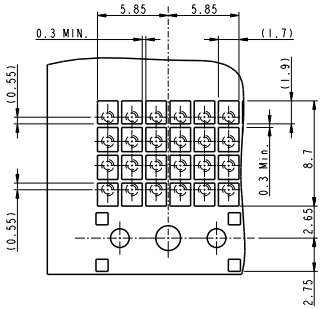
PCB LAYOUT: PLATING

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.



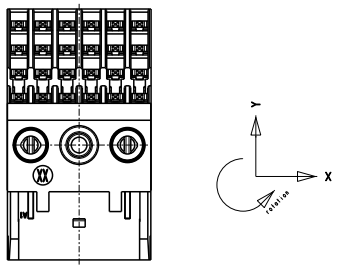
PCB LAYOUT : SOLDER PASTE

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 of or slides on the nozzle.
An inferior accurancy 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			
Mat code -		surface - ISO 1302	tolerance ISO 406 ISO 1101	projection	mm
Heattreat -					
Plating/Finish -					
Dr	P Poorter	2002/07/15		size A1	Scale 5:1
Eng	P Potters	020117	Product family METRAL [TM]		
Chr	P Potters	2002/02/14	Model Name 52048	ECN	LS08-0110
Appr	P Potters	2002/04/19	Model Revision E	REL Level	RELEASED
FCI	title 4x6 RA Assy Signal RCP PIP		dwg no 52048C		Rev. G
Pro/E file	catalog no		customer copy		sheet 2 of 2

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