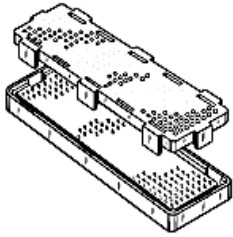


84500-002LF - MEG-ARRAY®
: 300 Position BGA Plug,
0mm Component Height,
1.27mm x 1.27mm Array, Lead-
free



www.fci.com



Mating Half

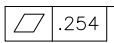
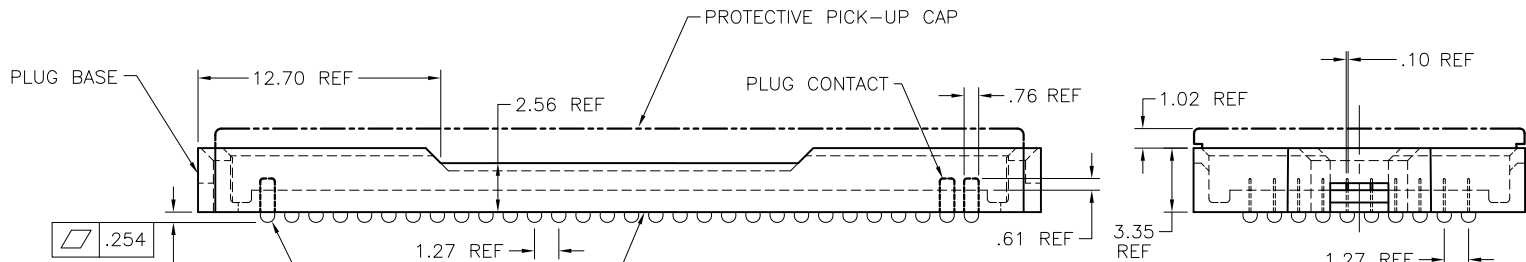
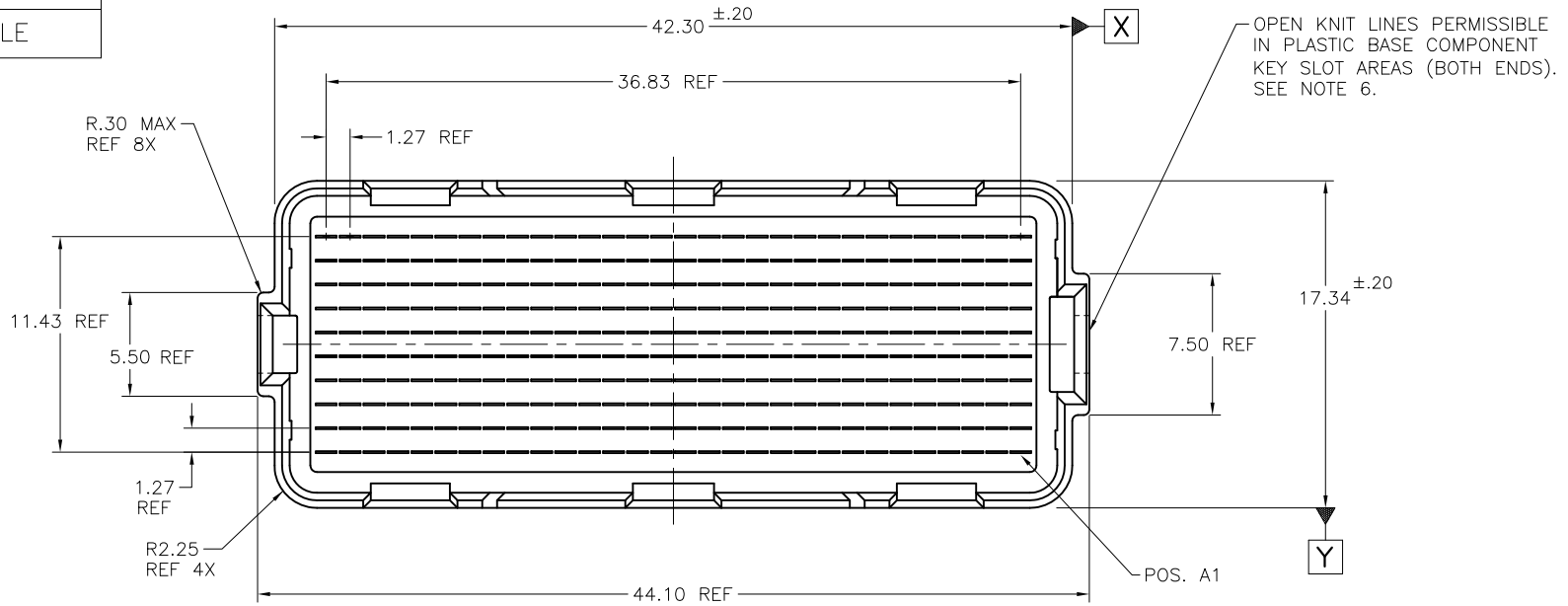
- ▶ 84501-001LF
- ▶ 84501-101LF
- ▶ 84501-201LF
- ▶ 84553-001LF
- ▶ 84553-101LF

Specifications

General	
Gender	Plug
Number of contacts (Total)	300
Quantity (per reel)	250
Dimensional	
Height (Mated)	5.5mm 4mm 8mm
Spacing (Board - approx. after soldering)	4 mm (0.157 in.) or 5.5 mm (0.217 in.) or 8 mm (0.315 in.)
Electrical	
Current rating	0.45 amps
Resistance (Contact)	20 to 25 m ohms max. (Initial), 10 m ohms max. increase (After testing)
Resistance (Insulation)	1000 M ohms
Voltage rating	200V AC
Mechanical	
Durability (Mating cycles)	50
Withdrawal Force	20 grams Per contact average
Mating force	30 grams Per contact average
Physical	
Material (Contact)	Copper Alloy
Material (Tail)	Lead-free solder balls: 95.5Sn / 4Ag / 0.5Cu
Material (Housing)	LCP
Plating (Contact area)	0.38 µm (15 µin.) Gold over 0.76 µm (30 µin.) Nickel
Temperature (Operating - range)	-40°C to +85°C
Approvals / Certifications	
UL File Number	E66906

CSA File Number	E66906
Approvals / Certifications	UL and CSA Approved
Other Features	
Most Popular Configuration	Yes
Packaging (Type)	Tape and Reel
Literature	950554-001
Pick-up Cap	Yes

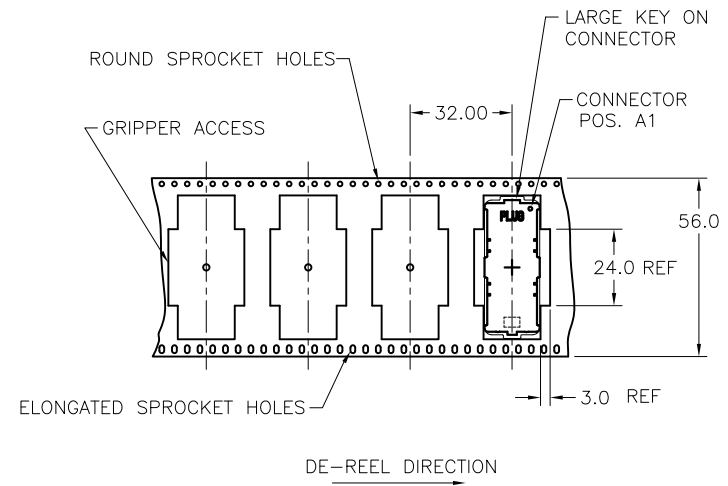
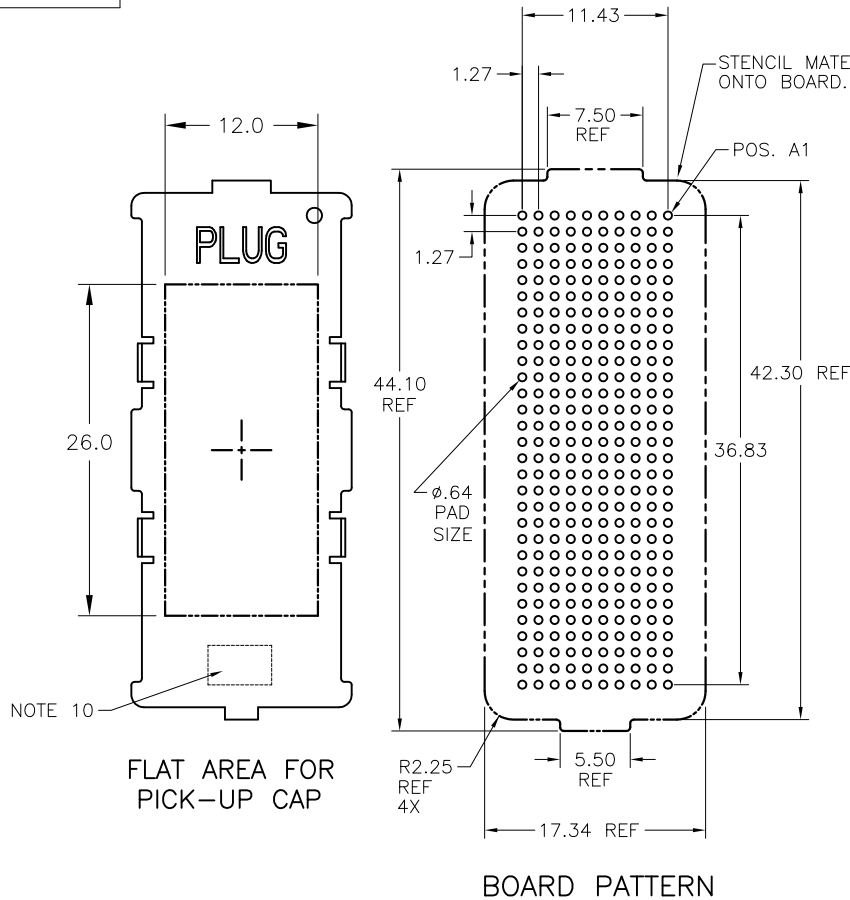
PRODUCT NUMBER
SEE TABLE



Ø.760 SOLDER BALLS
NOTE 2
ΦØ.30 X Y

mat'l. code				surface		tolerance		projection		product family	
SEE NOTE 1				ASME Y14.5		ASME Y14.5		ASME Y14.5		MEG-ARRAY	
ltr	ec'n no	dr	date	tolerances unless otherwise specified		angles		MM		title	
K	V06-0560	LP	2006-07-14			x*3				0mm PLUG ASSEMBLY	
L	V11-0029	HTB	2011-06-06			XX*13				10 X 30 = 300 POSITIONS	
M	V12-0030	SJ	2012-08-06	0° ±2'		XXX*051		scale 3:1		dwg no	
N	V12-0036	DCH	2012-11-13	dr		D. WAUGHEN		1998-12-16		sheet 1 of 5	
-	-	-	-	engr		D. HARPER		1998-12-16		size	
H	V03-0680	DAI	2003-06-19	chr		D. HARPER		1998-12-16		84500	
J	V04-0940	VS	2001-10-18	appd		D. HARPER		1998-12-16		A4	
sheet index		revision		N		N		N		type	
				1		2		3		CUSTOMER Drawing	

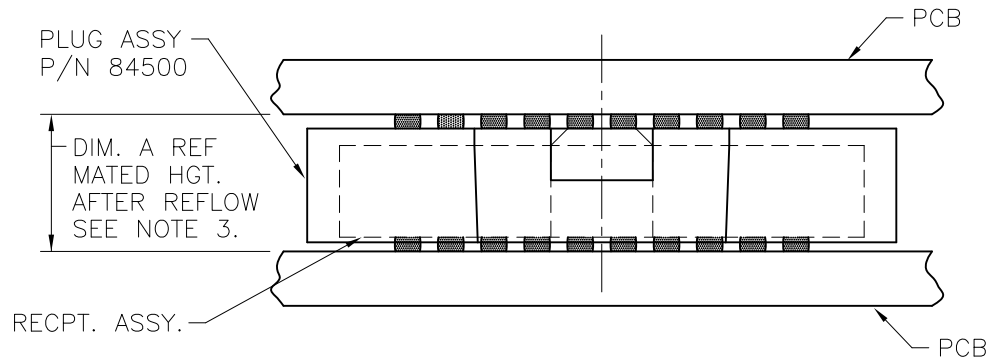
PRODUCT NUMBER
SEE TABLE



TAPE & REEL PACKAGING SCALE: NONE
PER EIA 481-3

mat'l. code		surface		tolerance		projection		product family					
SEE NOTE 1		ASME Y14.5		ASME Y14.5				MEG-ARRAY					
ltr	ecn no	dr	date	tolerances unless otherwise specified				title					
N				angles	<table border="1"> <tr><td>inches</td><td>xx.3</td></tr> <tr><td>mm</td><td>.XXx.13</td></tr> </table>	inches	xx.3	mm	.XXx.13	MM		10mm PLUG ASSEMBLY	
inches	xx.3												
mm	.XXx.13												
				0° ±2'	xxx+.051	scale 2:1		10 X 30 = 300 POSITIONS					
		dr	D. WAUGHEN	1998-12-16				dwg no					
		enrg	D. HARPER	1998-12-16				sheet 2 of 5 size					
		chr	D. HARPER	1998-12-16				84500 A4					
		appd	D. HARPER	1998-12-16				type CUSTOMER Drawing					
sheet index	revision sheet												

PRODUCT NUMBER
SEE TABLE



MATED HEIGHT TABLE		
DIM. A	RECPT. ASSY. P/N	-2XX PLATING
4.0	84501	SEE NOTE 4.
5.5	84502	*
8.0	84553	SEE NOTE 5.

* 84502 NOT AVAILABLE IN TELCORDIA/NORTEL VERSION.

MATED HEIGHT AFTER REFLOW IS BASED ON ϕ .64mm PAD (METAL-DEFINED)
AND .13mm SOLDER PASTE STENCIL THICKNESS. SEE NOTE 3.

END VIEW – MATED CONNECTORS SCALE: NONE

mat'l. code		surface		tolerance		projection		product family				
SEE NOTE 1		ASME Y14.5		ASME Y14.5				MEG-ARRAY				
ltr	ecn no	dr	date	tolerances unless otherwise specified				title				
N				angles	<table border="1"> <tr><td>x*3</td></tr> <tr><td>.XX*.13</td></tr> <tr><td>XXX*.051</td></tr> </table>	x*3	.XX*.13	XXX*.051	MM		10mm PLUG ASSEMBLY	
x*3												
.XX*.13												
XXX*.051												
				0' ±2'		scale 2:1		10 X 30 = 300 POSITION				
		dr	D. WAUGHEN	1998-12-16				dwg no				
		engr	D. HARPER	1998-12-16				sheet 3 of 5				
		chr	D. HARPER	1998-12-16				size				
		appd	D. HARPER	1998-12-16				84500				
sheet index		revision sheet						type				
								CUSTOMER Drawing				

PRODUCT NUMBER	PICK-UP CAP (NATURAL OR BLACK IN COLOR)	CONTACT PLATING AND THICKNESS	SOLDER BALL	NOTES
84500-002	YES	15µ" (.38µm) Au	SnPb	
84500-002LF	YES	15µ" (.38µm) Au	LEAD FREE	7 & 8
84500-092	YES	15µ" (.38µm) GXT	SnPb	
84500-092LF	YES	15µ" (.38µm) GXT	LEAD FREE	7 & 8
84500-102	YES	30µ" (.76µm) Au	SnPb	
84500-102LF	YES	30µ" (.76µm) Au	LEAD FREE	7 & 8
84500-192	YES	30µ" (.76µm) GXT	SnPb	
84500-192LF	YES	30µ" (.76µm) GXT	LEAD FREE	7 & 8
84500-202	YES	50µ" (1.27µm) Au SPECIAL	SnPb	4, & 5
84500-202LF	YES	50µ" (1.27µm) Au SPECIAL	LEAD FREE	4, 5, 7 & 8
84500-292	YES	50µ" (1.27µm) GXT SPECIAL	SnPb	4, & 5
84500-292LF	YES	50µ" (1.27µm) GXT SPECIAL	LEAD FREE	4, 5, 7, & 8
84500-A02	YES	30µ" (.76µm)	SnPb	9
84500-A02LF	YES	30µ" (.76µm)	LEAD FREE	7, 8 & 9
84500-302	YES	15µ" (.38µm) Au SPECIAL	SnPb	9
84500-302LF	YES	15µ" (.38µm) Au SPECIAL	LEAD FREE	8 & 9
84500-402	YES	30µ" (.76µm) Au SPECIAL	SnPb	9
84500-402LF	YES	30µ" (.76µm) Au SPECIAL	LEAD FREE	8 & 9
84500-502	YES	Au SPECIAL	SnPb	4, 5 & 9
84500-502LF	YES	Au SPECIAL	LEAD FREE	4, 5, 8, & 9

mat'l. code		SnPb		surface		tolerance		projection		product family	
SEE NOTE 1				ASME Y14.5		ASME Y14.5				MEG-ARRAY	
ltr	ec'n no	dr	date	tolerances unless otherwise specified						title	
N				angles	XXX+051	MM				0mm PLUG ASSEMBLY	
				0° ±2'	XXX+051	scale 2:1				10 X 30 = 300 POSITIONS	
				dr	T. BREWBAKER	2011-06-06				dwg no	
				engr	T. BREWBAKER	2011-06-06				sheet 4 of 5 size	
				chr	T. BREWBAKER	2011-06-06				84500 A4	
				appd	D. HORCHLER	2011-06-06				type CUSTOMER Drawing	
sheet	revision										
index	sheet										


PRODUCT NUMBER
SEE TABLE



NOTES:

- ① MATERIAL:
HOUSING: LCP
CONTACT: COPPER ALLOY

PLATING:
CONTACT: (SEE TABLE)
SOLDER BALL: (SEE TABLE)
EUTECTIC SnPb OR LEAD FREE
95.5Sn/4Ag/0.5Cu
- ② SOLDER BALLS WILL NOT BE PERFECT SPHERICAL SHAPE DUE TO REFLOW ATTACHMENT.
- ③ MATED HEIGHT EFFECTED BY CUSTOMER'S PCB PAD SIZE, PLATING, SOLDER REFLOW PROFILE, & SOLDER PASTE.
- ④ PLATING FOR INDICATED -2XX SERIES PRODUCT NUMBERS MEET THE REQUIREMENTS OF (GR-1217-CORE, CENTRAL OFFICE ENVIRONMENT, 25 YEAR LIFE EXPECTANCY).
- ⑤ PLATING FOR INDICATED -2XX SERIES PART NOS. IS Au OVER Ni WITH SPECIAL CONTACT GEOMETRY TO MEET REQUIREMENTS OF TELCORDIA GR-1217-CORE: CENTRAL OFFICE ENVIRONMENT.
- ⑥ KNIT LINE: SLIGHT VISIBLE MARKS (USUALLY A LINE) INDICATING THE DIRECTION AND MEETING POINT OF PLASTIC RESIN FLOW FRONTS TRAVELING AROUND ANY OBSTRUCTIONS TO THE RESIN FLOW VIA THE REQUIRED MOLD TOOLING.

- ⑦ FOR PROPER APPLICATION FOLLOW FCI APPLICATION SPECIFICATION GS-20-033 LEAD FREE SOLDER BALLS WILL NOT SOLDER PROPERLY IN A LEADED SOLDER PROCESS DUE TO A HIGHER REFLOW TEMPERATURE. LEAD FREE PRODUCT IS THEREFORE NOT BACKWARDS COMPATIBLE WITH LEADED OR SOME SOLDERING APPLICATIONS. REFERENCE FCI APPLICATION SPECIFICATION.
- ⑧ THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004 PRODUCT MEETING THIS DIRECTIVE IS IDENTIFIED IN THE LOT CODE NUMBER MARKED ON EACH PART BY HAVING AN "X" IN THE SEVENTH CHARACTER POSITION.
- ⑨ 84500-A02 AND -A02LF ARE CUSTOMER SPECIALS.
- ⑩ CURRENT COMPANY LOGO TO BE VISIBLE IN APPROXIMATE AREA SHOWN.

11. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, NEW VIEW OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION

mat'l. code		surface		tolerance		projection		product family		
SEE NOTE 1		ASME Y14.5		ASME Y14.5				MEG-ARRAY		
ltr	ecn no	dr	date	tolerances unless otherwise specified		MM		title		
N				angles	mm	X*3		10mm PLUG ASSEMBLY		
				0° ±2'		.XX*13		10 X 30 = 300 POSITIONS		
						XXX*051		scale 2:1		
		dr	T. BREWBAKER	2011-06-06				dwg no		
		engr	T. BREWBAKER	2011-06-06				sheet 5 of 5		size
		chr	T. BREWBAKER	2011-06-06				84500		A4
		appd	D. HORCHLER	2011-06-06				type		CUSTOMER Drawing
sheet index	revision sheet									