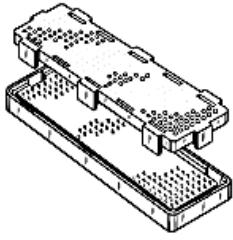


84516-102LF - MEG-ARRAY®
: 200 Position BGA Plug,
0mm Component Height,
1.27mm x 1.27mm Array, Lead-
free



www.fci.com



Mating Half

- ▶ 84517-001LF
- ▶ 84517-101LF
- ▶ 84517-201LF
- ▶ 55724-001LF
- ▶ 55724-101LF

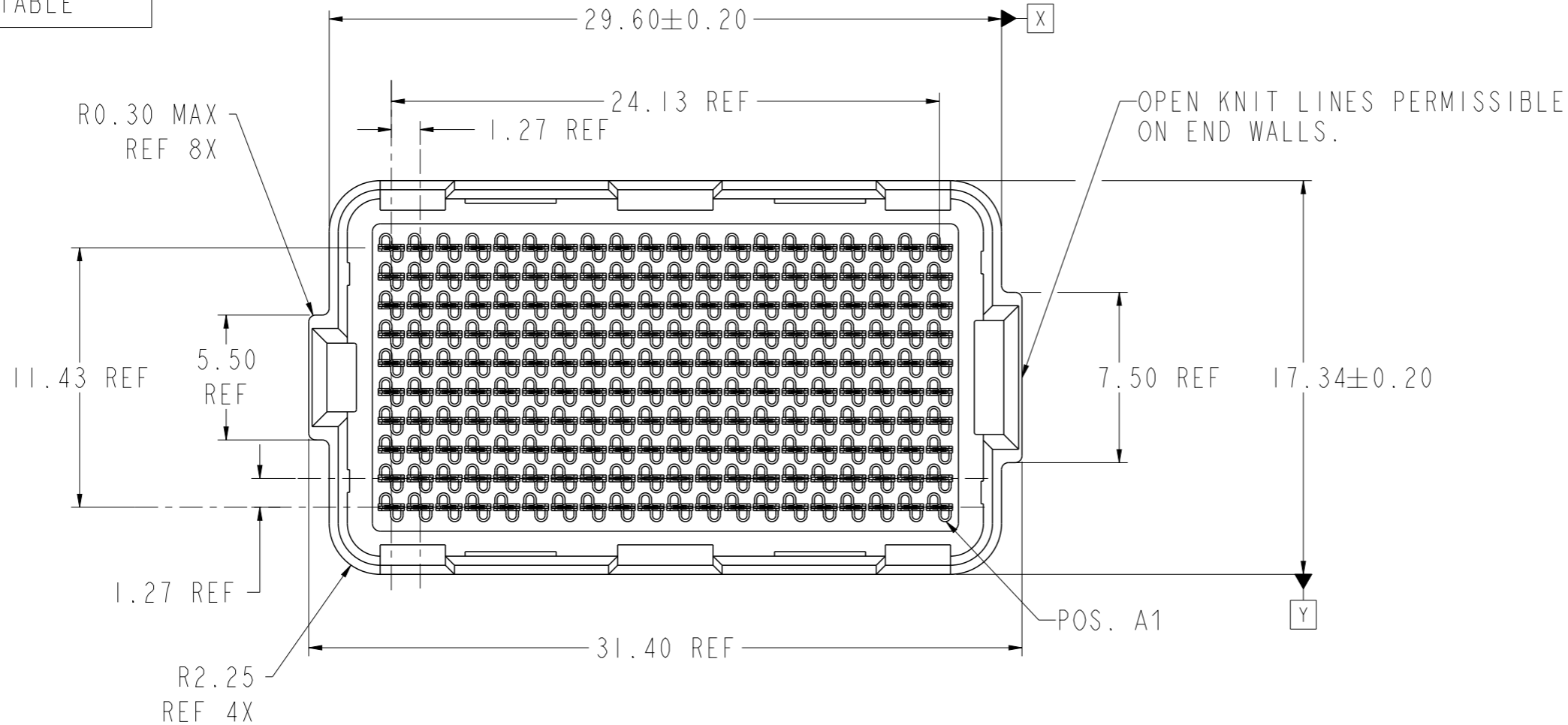
Specifications

General	
Gender	Plug
Number of contacts (Total)	200
Quantity (per reel)	250
Dimensional	
Height (Mated)	8mm 4mm 6mm
Spacing (Board - approx. after soldering)	4 mm (0.157 in.) or 6 mm (0.236 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)	0.76 µm (30 µin.) Gold over 0.76 µm (30 µin.) Nickel
Temperature (Operating - range)	-40°C to +85°C
Approvals / Certifications	

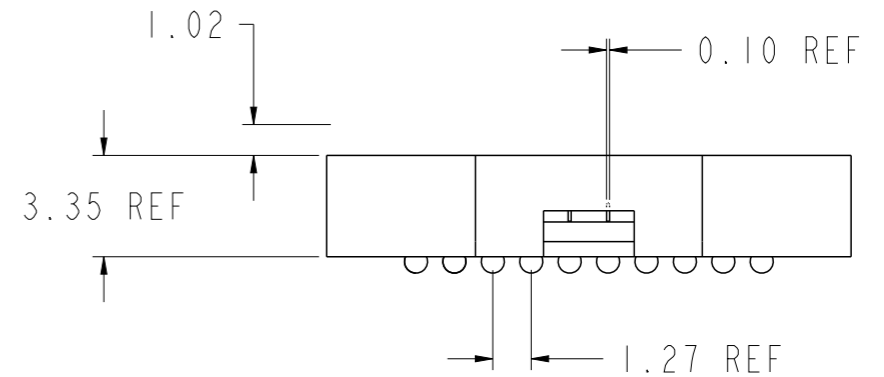
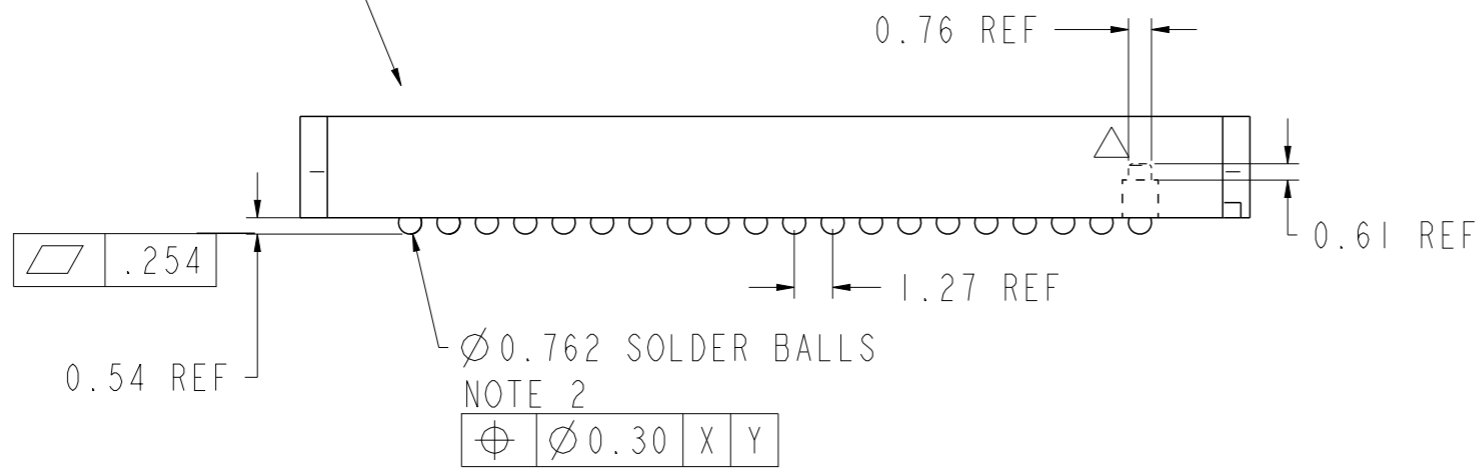
UL File Number	E66906
CSA File Number	E66906
Approvals / Certifications	UL and CSA Approved
Other Features	
Most Popular Configuration	-
Packaging (Type)	Tape and Reel
Literature	950554-001
Pick-up Cap	Yes

PRODUCT NUMBER

SEE TABLE



PROTECTIVE PICK-UP CAP



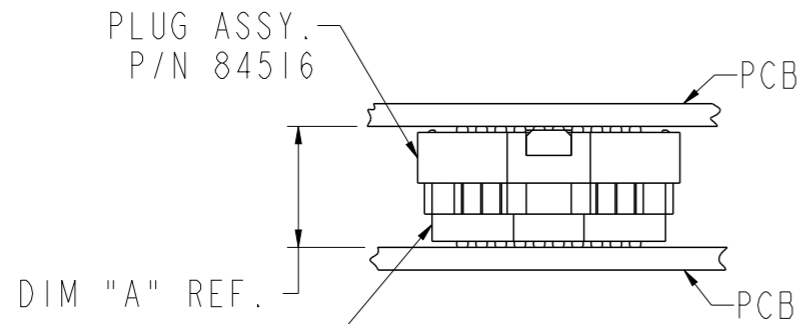
spec ref	-	dr	wcadmin	2001/11/16	projection	mm	size	A3	scale	4:1
tolerance std	ASME Y14.5	eng	Dave Horchler	2012/11/21			ecn no	ELX-V-13512-1	rel level	Released
	TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-			product family	MEG-ARRAY	rel level	Released
surface	✓	appr	R Marshall	2012/11/26	0mm PLUG ASSEMBLY		dwg no	84516	rev	H
ASME Y14.5	linear				10 x 20 = 200 POSITIONS					
	angular				www.fci.com	cat. no.	Product - Customer Drw	sheet 1 of 5		



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PRODUCT NUMBER

SEE TABLE



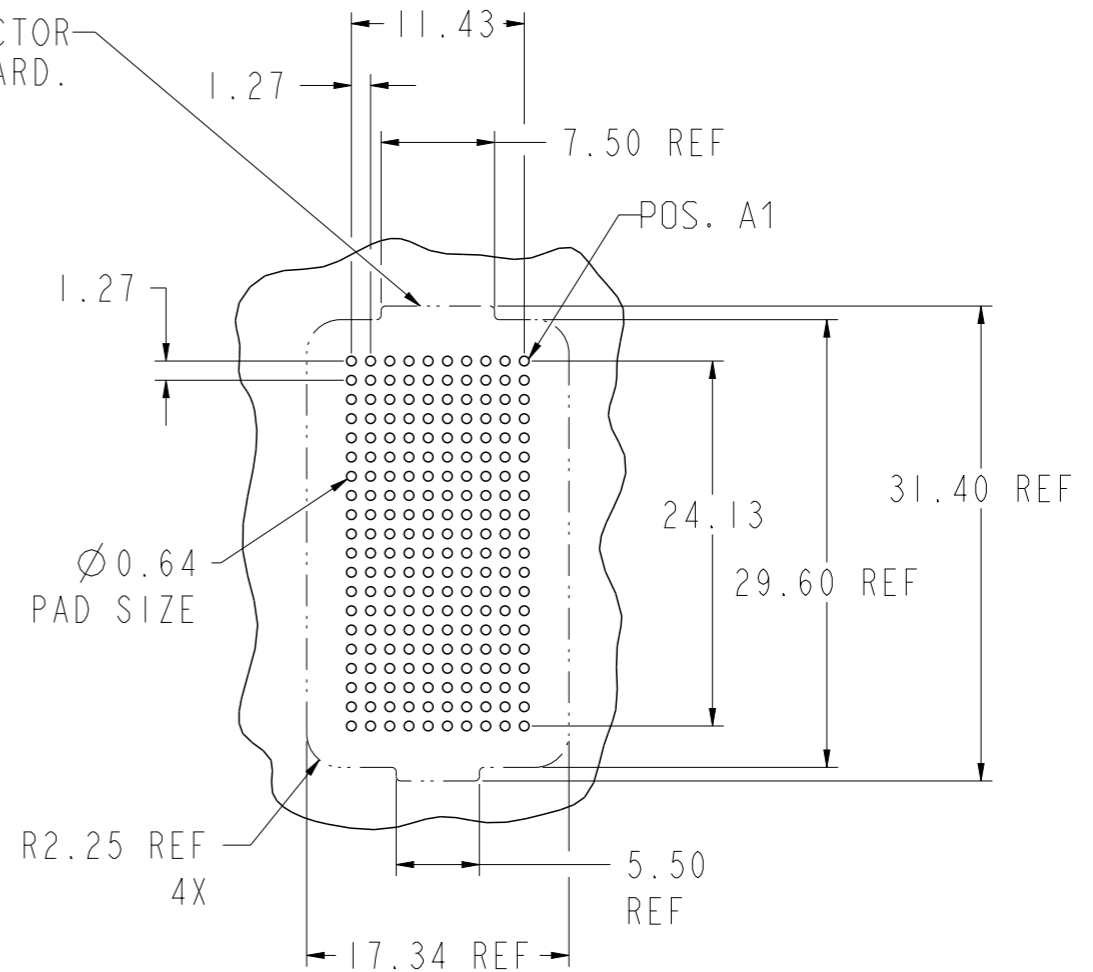
DIM "A" REF.
MATED HEIGHT
AFTER REFLOW
SEE NOTE 3

END VIEW - MATED CONNECTORS

MATED HEIGHT AFTER REFLOW IS BASED ON $\varnothing 0.64$ mm PAD (METAL DEFINED) AND 0.13mm SOLDER PASTE STENCIL THICKNESS. SEE NOTE 3.

RECPT. ASSY.
(SEE TABLE BELOW)

STENCIL MATED CONNECTOR
OUTLINE ONTO BOARD.



BOARD PATTERN

MATED HEIGHT TABLE

DIM "A"	RECPT. ASSY. P/N	-2XX PLATING
4.0	84517	SEE NOTE 4
6.0	55724	SEE NOTE 5
8.0	84535	SEE NOTE 5

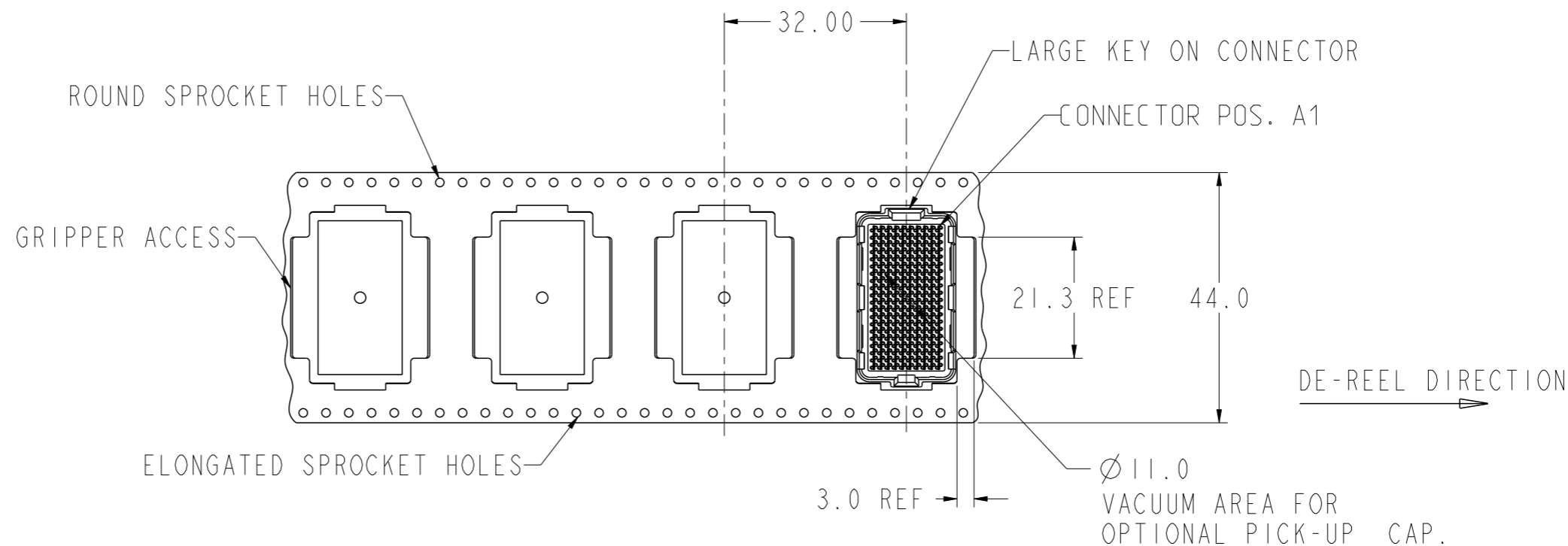
spec ref	-	dr	wcadmin	2001/11/16	projection	mm	size	A3	scale	10:1
tolerance std	ASME Y14.5	eng	Dave Horchler	2012/11/21			ecn no	ELX-V-13512-1		
		chr	-				rel level	ct	Released	
surface	✓	appr	R Marshall	2012/11/26	product family	MEG-ARRAY	dwg no	84516	rev	H
ASME Y14.5	angular	0°	±2°	www.fci.com	cat. no.	Product - Customer Drw	sheet 2 of 5			



Copyright FCI.

PRODUCT NUMBER

SEE TABLE



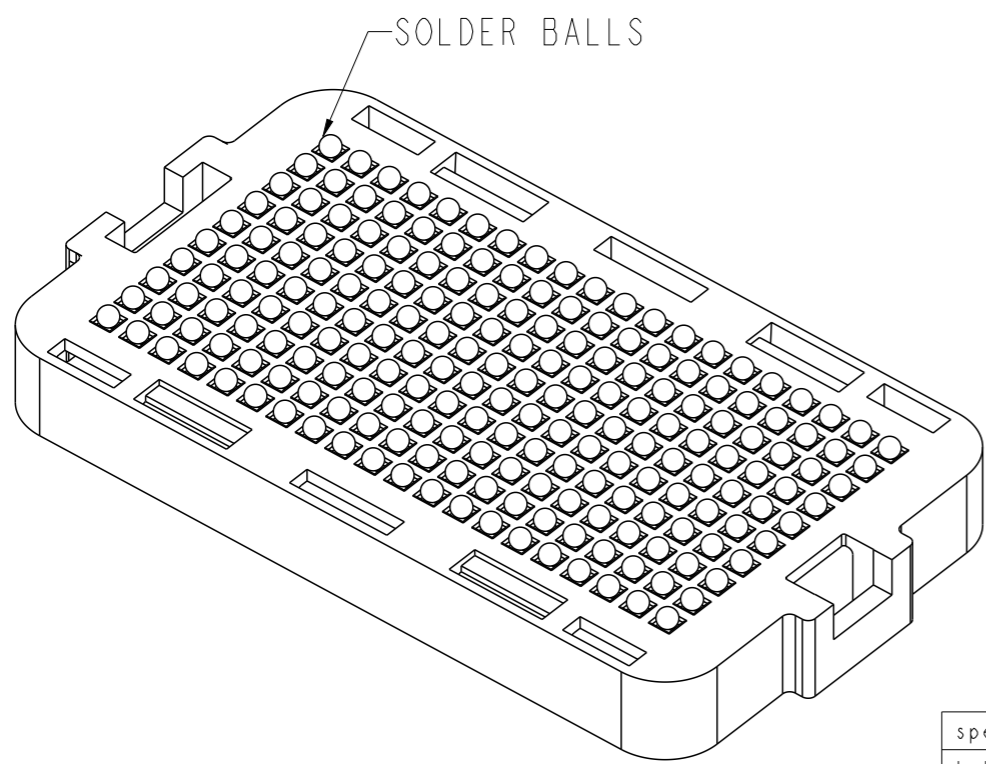
TAPE & REEL PACKAGING
PER EIA 481-3



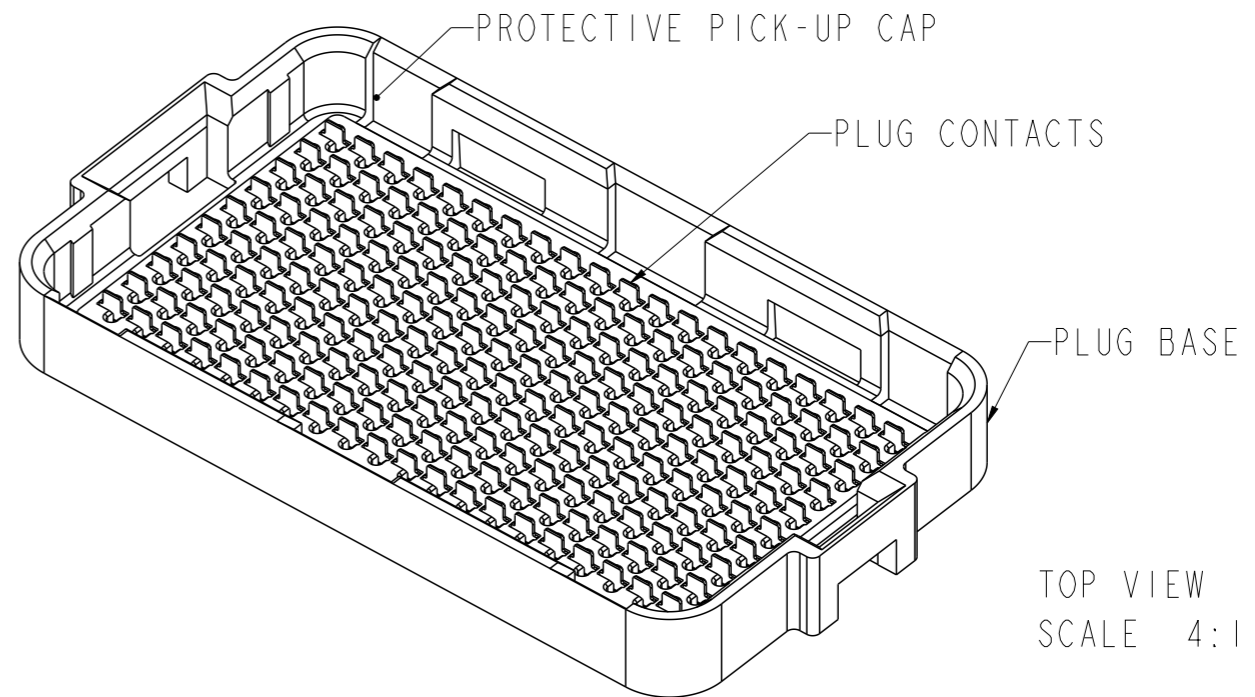
Copyright FCI.

spec ref	-			dr	w wadmin	2001/11/16	projection	mm	size	A3	scale	1:1		
tolerance std	ASME Y14.5			eng	Dave Horchler	2012/11/21			ecn no			ELX-V-13512-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED				chr	-	-			product family	MEG-ARRAY	rel level	ct	Released	
surface		linear	0.X ±0.3		www.fci.com	cat. no.	title 0mm PLUG ASSEMBLY 10 x 20 = 200 POSITIONS	dwg no 84516	rev H	ASME Y14.5			angular	0° ±2°
			0.XX ±0.10							Product - Customer Drw			sheet 3 of 5	
			0.XXX ±0.050							PDS: Rev :H			STATUS:Released	

PRODUCT NUMBER	PICK-UP CAP (NATURAL OR BLACK COLOR)	CONTACT PLATING AND THICKNESS	SOLDER BALL	NOTES
84516-002	YES	15μ" / (.38μm) Au	SnPb	9
84516-002LF	YES	15μ" / (.38μm) Au	LEAD FREE	7 AND 9
84516-092	YES	15μ" / (.38μm) GXT		
84516-092LF	YES	15μ" / (.38μm) GXT		
84516-102	YES	30μ" / (.76μm) Au	SnPb	9
84516-102LF	YES	30μ" / (.76μm) Au	LEAD FREE	7 AND 9
84516-192	YES	30μ" / (.76μm) GXT	SnPb	4, 5 AND 9
84516-192LF	YES	30μ" / (.76μm) GXT		
84516-202	YES	50μ" / (1.27μm) Au SPECIAL		
84516-202LF	YES	50μ" / (1.27μm) Au SPECIAL	LEAD FREE	4, 5, 7 AND 9
84516-292	YES	50μ" / (1.27μm) GXT SPECIAL		
84516-292LF	YES	50μ" / (1.27μm) GXT SPECIAL		
84516-A02	YES	30μ" / (.76μm) SPECIAL	SnPb	8
84516-A02LF	YES	30μ" / (.76μm) SPECIAL	LEAD FREE	7 AND 8
84516-302	YES	15μ" / (.38μm) Au SPECIAL	SnPb	8
84516-302LF	YES	15μ" / (.38μm) Au SPECIAL	LEAD FREE	7 AND 8
84516-402	YES	30μ" / (.76μm) Au SPECIAL	SnPb	8
84516-402LF	YES	30μ" / (.76μm) Au SPECIAL	LEAD FREE	7 AND 8
84516-502	YES	Au SPECIAL	SnPb	4, 5 AND 8
84516-502LF	YES	Au SPECIAL	LEAD FREE	4, 5, 7 AND 8



BOTTOM VIEW
SCALE 4:1



TOP VIEW
SCALE 4:1

spec ref	-	dr	wcadmin	2001/11/16	projection	mm	size	A3	scale	1:1		
tolerance std	ASME Y14.5	eng	Dave Horchler	2012/11/21			ecn no	ELX-V-13512-1	rel level	Released		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	apppr							R Marshall	2012/11/26
surface	✓	linear	0.X	±0.3		title 0mm PLUG ASSEMBLY 10 x 20 = 200 POSITIONS	dwg no 84516	rev H	Product - Customer Drw			
		angular	0°	±2°					www.fci.com	cat. no.	sheet 4 of 5	

Copyright FCI.

PRODUCT NUMBER

SEE TABLE

NOTES:

1. MATERIAL:
HOUSING: LCP
CONTACT: COPPER ALLOY

PLATING CONTACT: SEE TABLE ON SHEET 4
SOLDER BALL: SEE TABLE ON SHEET 4
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. FOR PROPER APPLICATION FOLLOW FCI APPLICATION SPECIFICATION
GS-20-033. LEAD FREE SOLDER BALLS WILL NOT SOLDER PROPERLY
IN A LEADED SOLDER PROSESS DUE TO A HIGHER REFLOW TEMPERATURE
LEAD FREE PRODUCT IS THEREFORE NOT BACKWARDS COMPATIBLE WITH
LEADED OR SOME SOLDERING APPLICATIONS. REFERENCE FCI
APPLICATION SPECIFICATION.

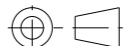

7. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVE AND OTHER
COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004. PRODUCT
MEETING THIS DIRECTIVE IS IDENTIFIED IN THE LOT CODE
NUMBER MARKED ON EACH PART BY HAVING AN "X" IN THE SEVENTH
CHARACTER POSITION.

8. 84516-A02 AND -A02LF PLATING IS CUSTOMER SPECIAL.

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



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spec ref	-	dr	w wadmin	2001/11/16	projection	mm	size	A3	scale	2:1
tolerance std	ASME Y14.5	eng	Dave Horchler	2012/11/21		← →	ecn no	ELX-V-13512-1		
	TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-				product family	MEG-ARRAY	rel level
surface	✓	appr	R Marshall	2012/11/26	0mm PLUG ASSEMBLY		dwg no	84516		rev
	linear				10 x 20 = 200 POSITIONS				H	
	angular			www.fci.com	cat. no.	Product - Customer Drw		sheet 5 of 5		