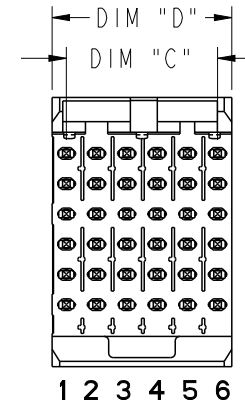
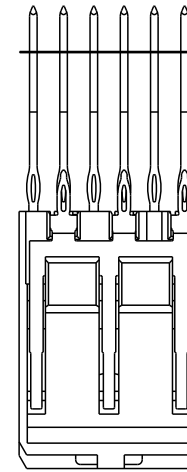
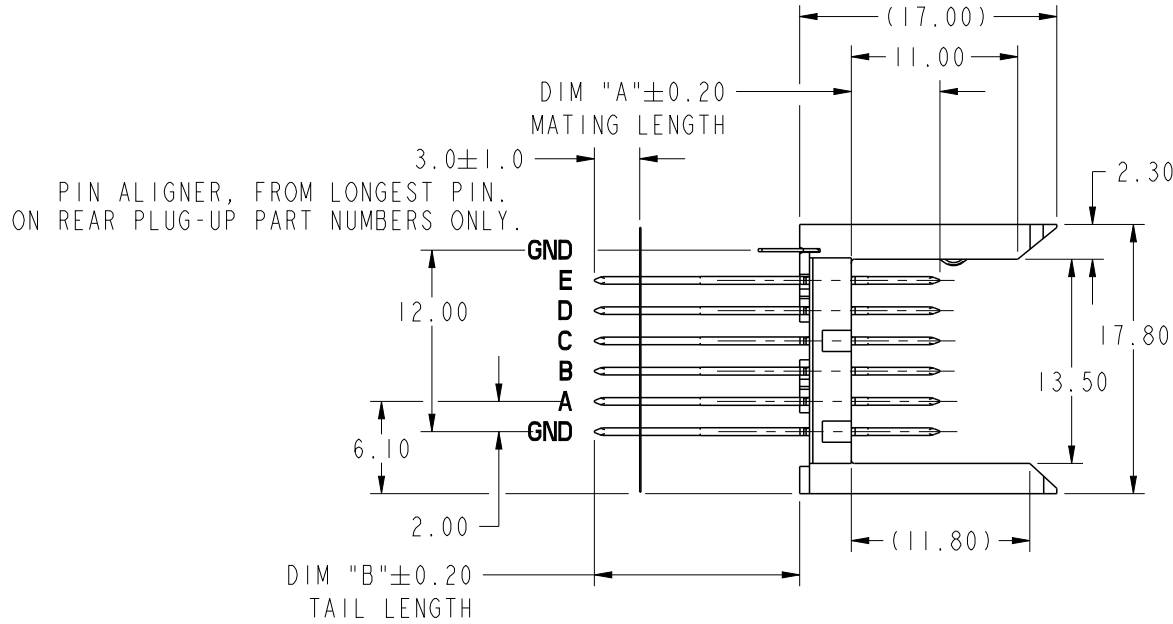


PRODUCT NUMBER  
SEE BELOW AND TABLE ON SHEET 2

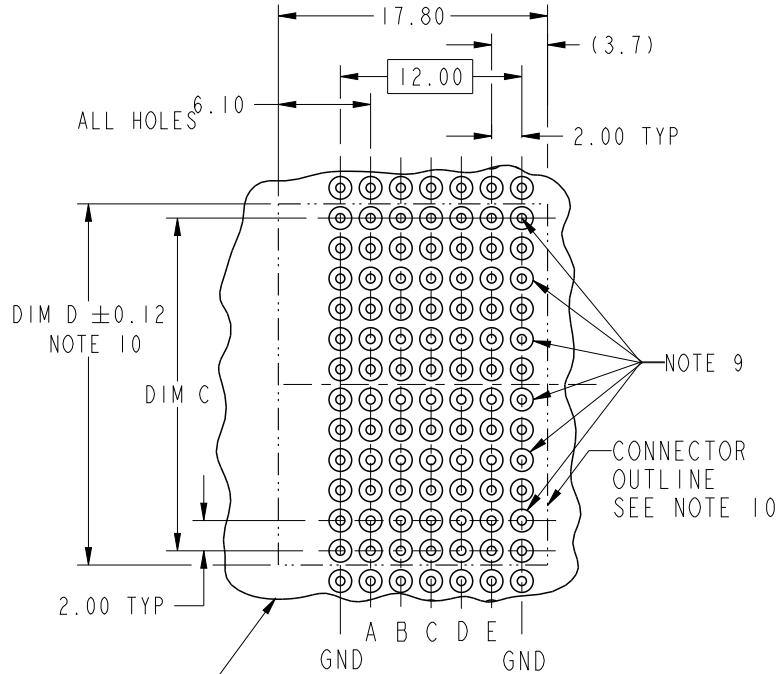
84817-X YY ZZZ (L) LF  
BASE NUMBER

LEAD FREE  
LUBRICATED (OPTIONAL) SEE NOTE 6  
SPECIAL LOAD PATTERN  
SEE SHEETS 6-7  
SIZE, SEE SHEET 2  
PLATING PERFORMANCE  
SEE NOTE 6.



spec ref -		dr P-Mathew Nebu 2011/05/20		projection		size A4		scale 2:1											
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M 2021/08/25						ecn no ELX-I-41559-1											
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -						rel level Released											
surface ISO 1302		appr Kuriakose, San 2021/08/25		product family METRAL 1000		rev		84817											
<table border="1"> <tr> <td rowspan="3">linear</td> <td>0.X</td> <td>±0.1</td> </tr> <tr> <td>0.XX</td> <td>±0.05</td> </tr> <tr> <td>0.XXX</td> <td>±0.020</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±2°</td> </tr> </table>		linear	0.X	±0.1	0.XX	±0.05	0.XXX	±0.020	angular	0°	±2°	<b>Amphenol FCI</b>		title VERTICAL SIGNAL HDR 5 ROW PRESS-FIT, SPECIAL LOAD, STD.		Product - Customer Drw		sheet 1 of 7	
linear	0.X		±0.1																
	0.XX		±0.05																
	0.XXX	±0.020																	
angular	0°	±2°																	

RECOMMENDED PCB LAYOUT




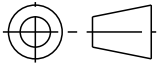
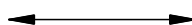
SHOWN FROM HEADER SIDE  
OF CIRCUIT BOARD  
SEE PRINT 58351 FOR ADDITIONAL  
PCB INFORMATION

PRODUCT NO.	SHROUD TO USE FOR REAR-PLUG-UP APPLICATIONS	LENGTH DIM D	PIN FIELD DIM C	CONNECTOR SIZE
84817-X01ZZZ(L)LF	84818-X01LF	11.88	10.00	1 MOD
84817-X02ZZZ(L)LF	84818-X02LF	23.88	22.00	2 MOD
84817-X03ZZZ(L)LF	84818-X03LF	35.88	34.00	3 MOD
84817-X04ZZZ(L)LF	84818-X04LF	47.88	46.00	4 MOD

spec ref		-		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41559-1		
	ISO 406				chr	-			product family	METRAL 1000		
ISO 1101				appr	Kuriakose, San	2021/08/25	rel level	Released				
surface	linear	0.X	±0.1	Amphenol FCi	title	VERTICAL SIGNAL HDR 5 ROW		dwg no	84817		rev	AK
		0.XX	±0.05			PRESS-FIT, SPECIAL LOAD, STD.						
ISO 1302	angular	0°	±2°			cat. no.	Product - Customer Drw		sheet 2 of 7			

NOTES:

1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
2. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
3. SEE FCI PUBLICATION 950511-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 1994
5. MATERIAL : BODY : THERMOPLASTIC UL94-V0.  
: CONTACT : COPPER ALLOY.
6. FOR PLATING PERFORMANCE REFER DRAWING # 10159408.
7. DIMENSIONAL RESTRICTIONS OF PINS IN HEADERS.  
FOR MATING WITH METRAL 1000 RECEPTACLES  
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROWS A-E  
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A  
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROWS A-E  
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A  
FOR MATING WITH METRAL 4000 RECEPTACLES  
DIM A : 5.00mm MIN, 6.50mm MAX FOR ROWS A, B, D & E  
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROW C  
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A  
DIM C : 5.00mm MIN, 7.00mm MAX FOR ROWS A, B, D & E  
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROW C  
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
8. THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLAINT SECTIONS OF THE GROUND SPRING OF THE HEADER DIRECTLY OPPOSE THE GROUND SPRING OF THE SHROUD. THE MIN PCB THICKNESS FOR FRONT PLUG-UP ONLY APPLICATIONS IS 1.6mm.
9. THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
10. THE 'CONNECTOR OUTLINE' IS THE MIN OUTLINE REQUIRED. TO DETERMINE THE OUTLINE NECESSARY TO PERMIT THE VARIOUS TYPES OF REPAIR OPERATIONS, SEE APPLICATION SPECIFICATION GS-20-010.
14. THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.
15. ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION INFRA-RED OR VAPOR PHASE REFLOW OVEN.
16. SEE PRODUCT SPEC GS-12-110 FOR PERFORMANCE, TEST, AND SIGNAL INTEGRITY INFORMATION.
17. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE DRAWING CURRENT REVISION

spec ref		-		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41559-1		
				chr	-	-				rel level	Released	
ISO 406 ISO 1101				appr	Kuriakose, San	2021/08/25	product family	METRAL 1000				
surface ISO 1302	linear	0.X	±0.1	Amphenol FCI	VERTICAL SIGNAL HDR 5 ROW PRESS-FIT, SPECIAL LOAD, STD.			dwg no	84817		rev	AK
		0.XX	±0.05									
		0.XXX	±0.020									
	angular	0°	±2°	cat. no.	Product - Customer Drw			sheet 3 of 7				

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,E	GROUND ROW	ROWS:A,B,DE	ROW C	GROUND ROW
01*	5.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
22		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
30		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
05		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
35		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
48		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
40		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
65		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
09		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
02*	5.75	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
44		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
31		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
06		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
36		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
49		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
25		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
66		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
10		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
03*		6.50	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
45	12.20		2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
32	12.95		2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
07	13.70		2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
37	14.45		3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
50	15.20		3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
41	15.70		4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
24	16.40		5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
11	17.10		5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

spec ref -		dr P-Mathew Nebu	2011/05/20			size A4	scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng Rahul Mohan-M	2021/08/25			ecn no ELX-I-41559-1	
		chr -	-				
surface  ISO 1302	linear 0.X ±0.1 0.XX ±0.05 0.XXX ±0.020	appr Kuriakose, San	2021/08/25	product family METRAL 1000	rel level Released		
				VERTICAL SIGNAL HDR 5 ROW PRESS-FIT, SPECIAL LOAD, STD.		dwg no 84817 rev AK	
				cat. no.	Product - Customer Drw	sheet 4 of 7	

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,E	GROUND ROW	ROWS:A,B,DE	ROW C	GROUND ROW
04*	7.25	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
46		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
33		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
08		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
38		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
51		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
42		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
67		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
12		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
19*		8.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
47	12.20		2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
34	12.95		2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
20	13.70		2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
39	14.45		3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
52	15.20		3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
43	15.70		4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
68	16.40		5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
21	17.10		5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

\* STUB PINS - NO REAR PLUG-UP  
 \*\* THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THEN THE OTHER PINS.

spec ref	-		dr	P-Mathew Nebu	2011/05/20			size	A4	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41559-1		
ISO 406 ISO 1101			chr	-	-			rel level	Released		
surface		linear	0.X	±0.1		product family METRAL 1000	product family METRAL 1000	rev 84817	AK		
ISO 1302		0.XX	±0.05	VERTICAL SIGNAL HDR 5 ROW PRESS-FIT, SPECIAL LOAD, STD.							
		0.XXX	±0.020								
	angular	0°	±2°	cat. no.	Product - Customer Drw	sheet 5 of 7					

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84817-XY001LF	E	01
	D	
	C	
	B	
	A	
84817-XY002LF *RPU	GND	22
	E	
	D	
	C	
	B	
84817-XY011LF	A	02
	GND	
	E	
	D	
	C	
84817-XY021LF	B	02
	A	
	GND	
	E	
	D	

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 2.95 TO 3.80mm

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84817-XY022LF	E	02
	D	
	C	
	B	
	A	
84817-XY023LF	GND	02
	E	
	D	
	C	
	B	
84817-XY024LF *RPU	A	06
	GND	
	E	
	D	
	C	
84817-XY025LF *RPU	B	06
	A	
	GND	
	E	
	D	

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 4.00 TO 5.30mm

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: \*2.30-3.30 TO 5.30mm

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84817-XY026LF *RPU	E	22
	D	
	C	
	B	
	A	
84817-XY027LF *RPU	GND	01
	E	
	D	
	C	
	B	
84817-XY028LF	A	01
	GND	
	E	
	D	
	C	
84817-XY029LF	B	02
	A	
	GND	
	E	
	D	
84817-XY030LF *RPU	C	07
	B	
	A	
	GND	
	E	
84817-XY031LF *RPU	D	25
	C	
	B	
	A	
	GND	

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 2.95 TO 3.80mm

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 2.95 TO 3.80mm

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 2.95 TO 3.80mm

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 2.95 TO 3.80mm

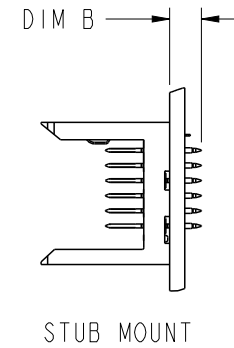
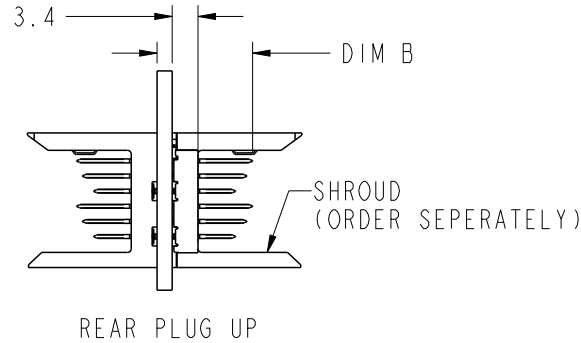
spec ref	-	dr	P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	2:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41559-1			
ISO 406		chr	-	-				rel level	Released		
ISO 1101		appr	Kuriakose, San	2021/08/25					product family	METRAL 1000	
surface	linear	Amphenol FCI	VERTICAL SIGNAL HDR 5 ROW PRESS-FIT, SPECIAL LOAD, STD.			dwg no	84817		rev	AK	
ISO 1302	0.X										±0.1
	0.XX										±0.05
	0.XXX	±0.020									
	angular	0°	±2°	cat. no.	Product - Customer Drw			sheet 6 of 7			

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84817-XY032LF	E	22
	D	
	C	45
	B	22
	A	
GND		
84817-XY033LF *RPU	E	06
	D	
	C	
	B	
	A	
GND	30	
84817-XY034LF	E	03
	D	
	C	
	B	
	A	
GND	02	
84817-XY035LF	E	01
	D	
	C	
	B	
	A	
GND	01	
84817-XY036LF *RPU	E	22
	D	
	C	01
	B	
	A	
GND	22	
84817-XY037LF	E	01
	D	
	C	
	B	
	A	
GND	02	

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84817-XY038LF *RPU	E	49
	D	
	C	
	B	
	A	
GND		
84817-XY039LF *RPU	E	36
	D	
	C	
	B	
	A	
GND	06	

PCB THICKNESS  
RANGE FOR REAR  
PLUG UP  
APPLICATIONS:  
4.80 TO 6.80mm

PCB THICKNESS  
RANGE FOR REAR  
PLUG UP  
APPLICATIONS:  
2.95 TO 3.80mm



spec ref	-	dr	P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	2:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41559-1			
ISO 406		chr	-	-				rel level	Released		
ISO 1101		appr	Kuriakose, San	2021/08/25	product family	METRAL 1000					
surface	linear	0.X	±0.1	<b>Amphenol FCI</b>	VERTICAL SIGNAL HDR 5 ROW			dwg no	84817		rev
		0.XX	±0.05								
ISO 1302	angular	0.XXX	±0.020	cat. no.	Product - Customer Drw			sheet	7 of 7		
		0°	±2°								