

A

B

C

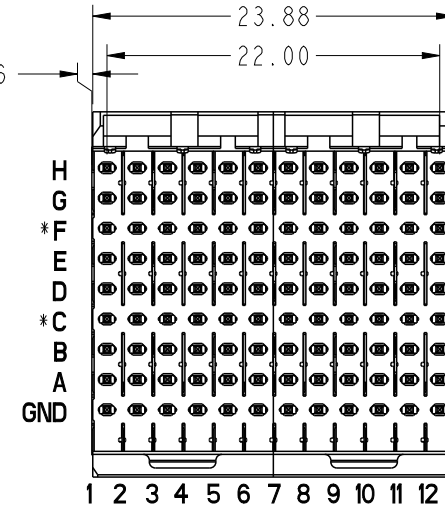
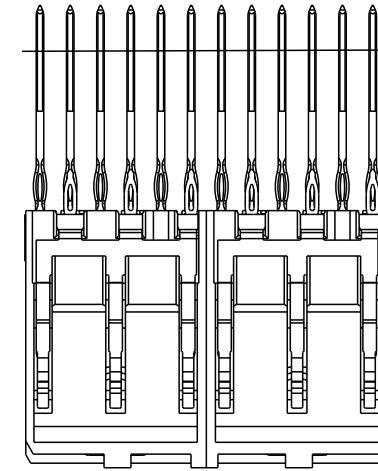
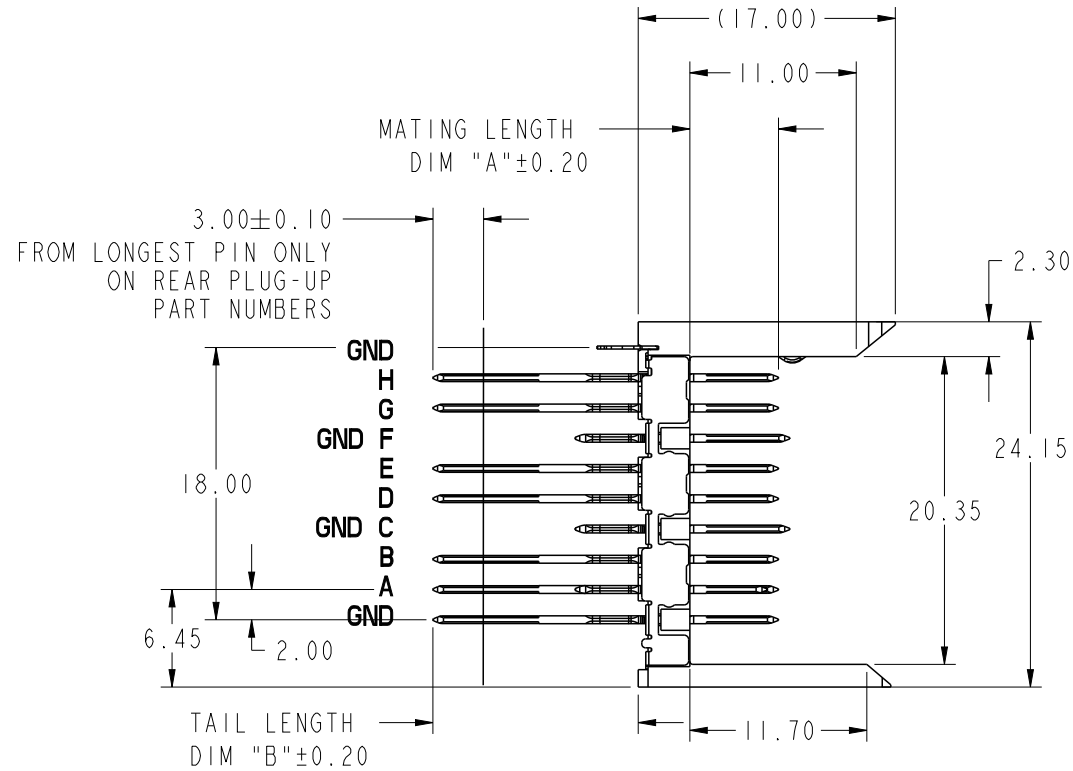
D

PRODUCT
NUMBER

63741-XXX(L)LF

L REFER LUBRICATED (OPTIONAL) $\triangle$
SEE NOTE 6X REFER PLATING PERFORMANCE $\triangle$
SEE NOTE 6

*ROW C AND F INFORMATION
ODD NUMBER COLUMNS WITHIN ROW C & F ARE COMMONED
TO GROUND INTERNALLY WITHIN THE HOUSING. THE
EVEN NUMBER COLUMNS WITHIN ROW C & F ARE NOT.
FOR MAXIMUM PERFORMANCE IT IS RECOMMENDED THESE
EVEN COLUMNS BE GROUND COMMONED WITHIN PCB.
SEE NOTE 11



spec ref		dr		P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	1:1				
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M			2021/08/16	ecn no				ELX-I-41694-1		
				chr	-			-	rel level				Released		
				appr				Kuriakose, San	2021/08/16	product family		METRAL 2000			
surface	linear	0.X	±0.3	Amphenol FCI	title				VERTICAL SIGNAL HDR 8 ROW		dwg no	63741		rev	V
		0.XX	±0.13												
		0.XXX	±0.050												
	ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.		Product - Customer Drw				sheet 1 of 6			

Creo File:ELX-MC-AAC,REV F,2020-12-21

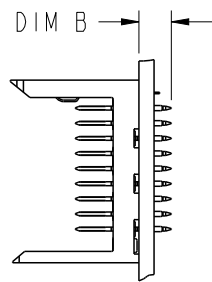
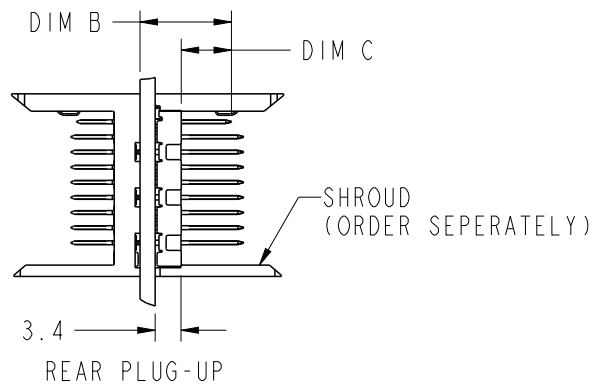
2

3

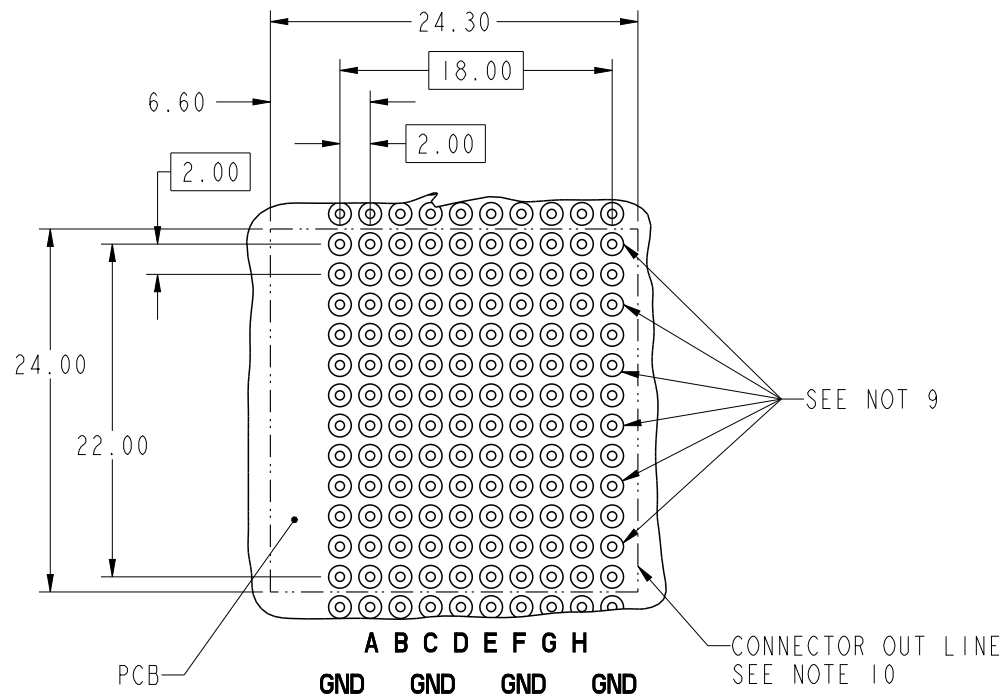
PDS: Rev :V

STATUS:Released

Printed: Aug 16, 2021



STUB MOUNT



RECOMMENDED PCB HOLE PATTERN
(COMPONENT SIDE)
FOR PTH DETAILS REFER DRAWING 58351.

spec ref				dr	P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	1:1	
tolerance std				eng	Rahul Mohan-M	2021/08/16			ecn no	ELX-I-41694-1			
ISO 406 ISO 1101				chr	-	-			rel level	Released			
TOLERANCES UNLESS OTHERWISE SPECIFIED				appr	Kuriakose, San	2021/08/16			product family	METRAL 2000			
surface	linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR 8 ROW				dwg no	63741		rev	V
		0.XX	±0.13										
		0.XXX	±0.050										
	ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.				Product - Customer Drw			sheet 2 of 6

PIN CODE NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C, D,E,F,G & H	GROUND ROW	ROWS:A,B,D,E,G & H	ROW C & F	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	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

* STUB PINS - NO REAR PLUG-UP

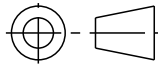
** THE GREATEST RANGE OCCURS WHEN THE B
DIMENSION OF PIN 'GND' IS ONE SIZE
SHORTER THEN THE OTHER PINS.

spec ref		dr		P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	1:1
tolerance std		eng		Rahul Mohan-M	2021/08/16			ecn no		ELX-I-41694-1	
ISO 406 ISO 1101		chr		-	-			rel level		Released	
		appr		Kuriakose, San	2021/08/16			product family			
surface ISO 1302 ✓	linear	0.X	±0.3	Amphenol FCi	title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.			dwg no 63741		rev V	
		0.XX	±0.13								
		0.XXX	±0.050								
	angular	0°	±2°	amphenol-icc.com	cat. no.		Product - Customer Drw			sheet 3 of 6	

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C, D,E,F,G & H	GROUND ROW	ROWS:A,B,D,E,G & H	ROW C & F	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	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	projection 	MM 	size	A4	scale	1:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M			2021/08/16	ecn no				ELX-I-41694-1	
				chr	-			-	rel level				Released	
				appr	Kuriakose, San			2021/08/16	product family					
surface	linear	0.X	±0.3	Amphenol FCI	title	VERTICAL SIGNAL HDR 8 ROW				dwg no	63741		rev	V
		0.XX	±0.13											
		0.XXX	±0.050											
	ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw				sheet 4 of 6			

SELECT LOAD PATTERNS													
METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X01LF STUB MOUNT	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	03	03	03	03	03	03	03	03	03	03	03	03
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	03	03	03	03	03	03	03	03	03	03	03	03
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	01	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X02LF *RPU	H	49	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49	49
	A	48	49	49	49	49	49	49	49	49	49	49	49
	GND	49	49	49	49	49	49	49	49	49	49	49	49

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
5.50 - 6.80

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X03LF	H	02	02	02	02	02	02	02	02	02	02	02	01
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	03	03	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02	02

*REAR PLUG-UP PART NUMBER

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X04LF	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	01	03	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X05LF *RPU	H	25	25	25	25	25	25	25	25	25	25	25	25
	G	24	24	24	24	24	24	24	24	24	24	24	24
	F	12	12	12	12	12	12	12	12	12	12	12	12
	E	25	25	25	25	25	25	25	25	25	25	25	25
	D	24	24	24	24	24	24	24	24	24	24	24	24
	C	12	12	12	12	12	12	12	12	12	12	12	12
	B	49	25	25	25	25	25	25	25	25	25	25	25
	A	48	24	24	24	24	24	24	24	24	24	24	24
	GND	49	49	49	49	49	49	49	49	49	49	49	49

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
5.70 - 7.20
FOR METRAL 1000
APPLICATIONS
(RECEPTACLE)
ADD 6.00 - 7.20
FOR METRAL 4000
APPLICATIONS.

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X06LF *RPU	H	49	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49	49
	A	35	49	49	49	49	49	49	49	49	49	49	49
	GND	36	36	36	36	36	36	36	36	36	36	36	36

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.75 - 6.45 FOR
METRAL 1000
APPLICATIONS
(RECEPTACLE)
ADD 4.80 - 6.45
FOR METRAL 4000
APPLICATIONS.

spec ref		dr		P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/16	ecn no			ELX-I-41694-1				
		chr	-	-				rel level		Released		
ISO 406		appr	Kuriakose, San	2021/08/16	product family							
ISO 1101												
surface	linear	0.X	±0.3	Amphenol FCI	title			VERTICAL SIGNAL HDR 8 ROW	dwg no	63741		rev
		0.XX	±0.13									
		0.XXX	±0.050									
	ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.		Product - Customer Drw			sheet 5 of 6	
				P.F. 96 POS. SELECT LOAD EXT.						V		

NOTES:

- SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
- SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
- SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5M, 1994
- MATERIAL : BODY : THERMOPLASTIC UL94-V0.
: CONTACT : COPPER ALLOY.
- FOR PLATING PERFORMANCE REFER DRAWING # 10159408.
- DIMENSIONAL RESTRICTIONS OF PINS IN HEADERS.
FOR MATING WITH METRAL 1000 RECEPTACLES
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROWS A-H
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-H
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, G & H
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROWS C & F
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, G & H
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROWS C & F
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
- 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.

- THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
- 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.
- FOR FRONT PLUG-UP APPLICATIONS, THE EVEN NUMBERED PINS IN ROW 'C' & 'F' CAN BE USED FOR POWER AS WELL AS FOR GROUND. IF THE SURROUNDING PINS ARE NOT USED FOR POWER, THEN EACH PIN CAN CARRY 3 AMPS. IF THE SURROUNDING PINS ARE USED FOR POWER, THEN EACH PIN CAN CARRY 1 AMP. WHEN THE SURROUNDING PINS ARE USED ONLY FOR LOW SPEED SIGNALS, THEN THE EVEN NUMBERED 'C' AND 'F' ROW PINS CAN ALSO BE USED FOR LOW SPEED SIGNALS. THIS IS NOT TRUE FOR REAR PLUG-UP APPLICATIONS USING METRAL 2000 SHROUD AS IN THIS CASE ALL 'C' AND 'F' ROW PINS ARE COMMON TO GROUND.
- THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.
- ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
- A Δ SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

spec ref				dr	P-Mathew Nebu	2011/05/20	projection	MM	size	A4	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/16			ecn no	ELX-I-41694-1		
				chr	-	-			rel level			Released
ISO 406				appr	Kuriakose, San	2021/08/16	product family					
ISO 1101												
surface	linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR 8 ROW	dwg no	63741			rev	V	
		0.XX	±0.13									
		0.XXX	±0.050									
	ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.		Product - Customer Drw			sheet 6 of 6	

Crea File:ELX-MC-AAC,REV F,2020-12-21