

PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	APPLICATION	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
55499-1YYY	TELCORDIA CO	STANDARD	84621-101
55499-1YYYYLF		LEAD FREE	84621-101LF
55499-5YYY	TELCORDIA UE	STANDARD	84621-501
55499-5YYYYLF		LEAD FREE	84621-501LF

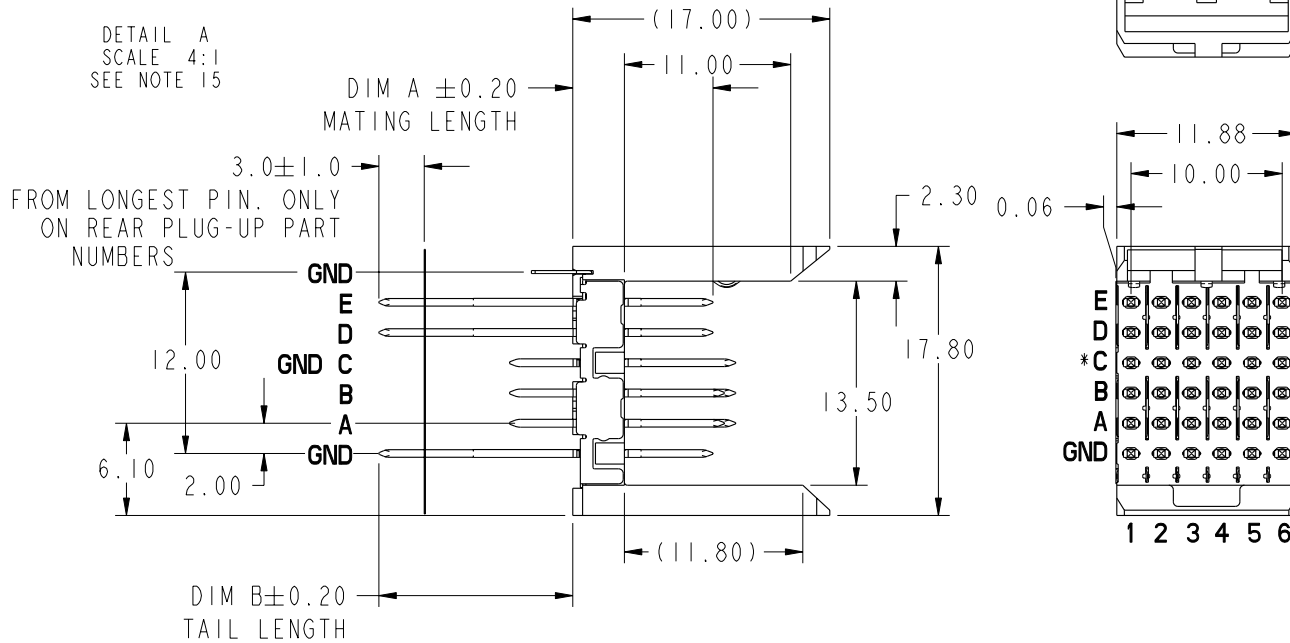


EYE OF NEEDLE
PRESS FIT SECTION

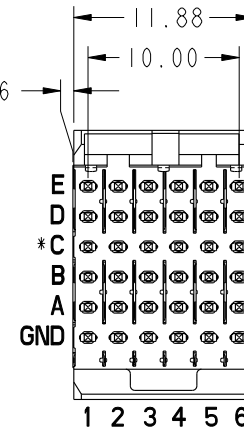
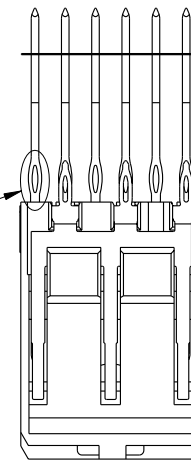


BABY-H
PRESS FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 15



SEE DETAIL A



***ROW C INFORMATION**
 ODD NUMBER COLUMNS WITHIN ROW C ARE COMMONED TO GROUND INTERNALLY WITHIN THE HOUSING. THE EVEN NUMBER COLUMNS WITHIN ROW C ARE NOT. FOR MAXIMUM PERFORMANCE IT IS RECOMMENDED THESE EVEN COLUMNS BE GROUND COMMONED WITHIN PCB. SEE NOTE 12.

mat'l code				tolerances unless otherwise specified				CUSTOMER	
SEE NOTE 5								FCJ	
ltr	ecn no.	dr	date			COPY		www.fciconnect.com	
M	V06-0492	DCH	2006-05-23	linear	0.X ± 0.3	projection		title	
N	V07-0184	DCH	2007-04-23		0.XX ± 0.13			VERTICAL SIGNAL HDR 5 ROW	
P	V07-0688	HTB	2007-11-20	angles	0.XXX ± 0.051			P.F. 30 POS. SELECT LOAD STD.	
R	V08-0008	LP	2008/11/21	dr	0° $\pm 2°$	MM		product family	METRAL 2000
-	-	-	-	engr	E. KROPER 2001-06-20	scale		size	dwg no
K	V03-1156	TAB	2003-10-29	chr	J. VOLSTORF 2001-06-20	1:1		A	55499
L	V05-0814	VS	2005-09-20	appd	J. VOLSTORF 2001-06-20			code	213
sheet index	revision sheet	R 1	R 2	R 3	R 4	R 5	R 6	cage code	22526

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PIN CODE 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,D&E	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
3*	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



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* STUB PINS - NO REAR PLUG-UP

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

mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER	FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3	projection	COPY	
R					0.XX ±0.13		title	
					0.XXX ±.051		VERTICAL SIGNAL HDR 5 ROW	
				angles	0° ±2°		P.F. 30 POS. SELECT LOAD STD.	
				dr	E. KROPER 2001-06-20	MM	product family	METRAL 2000
				engr	J. VOLSTORF 2001-06-20		code	213
				chr	J. VOLSTORF 2001-06-20		size	dwg no
				appd	J. VOLSTORF 2001-06-20		55499	sheet
sheet index	revision sheet					scale	1:1	2

A

A

B

B

PIN CODE 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,D&E	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

A

A



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B

* STUB PINS - NO REAR PLUG-UP

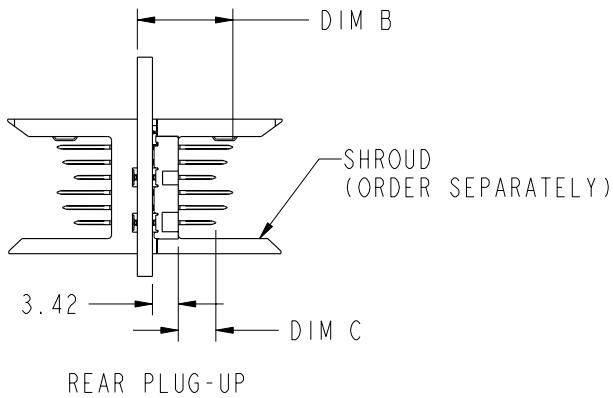
** THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THAN THE OTHER PINS.

mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER		www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3	COPY			title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.
R					0.XX ±0.13	MM			
					0.XXX ±.051				
				angles	0° ±2°				
		dr	E. KROPER	2001-06-20	scale 1:1		product family METRAL 2000		code
		enrg	J. VOLSTORF	2001-06-20			size	dwg no	213
		chr	J. VOLSTORF	2001-06-20			A	55499	sheet
		appd	J. VOLSTORF	2001-06-20					3
sheet index	revision sheet								

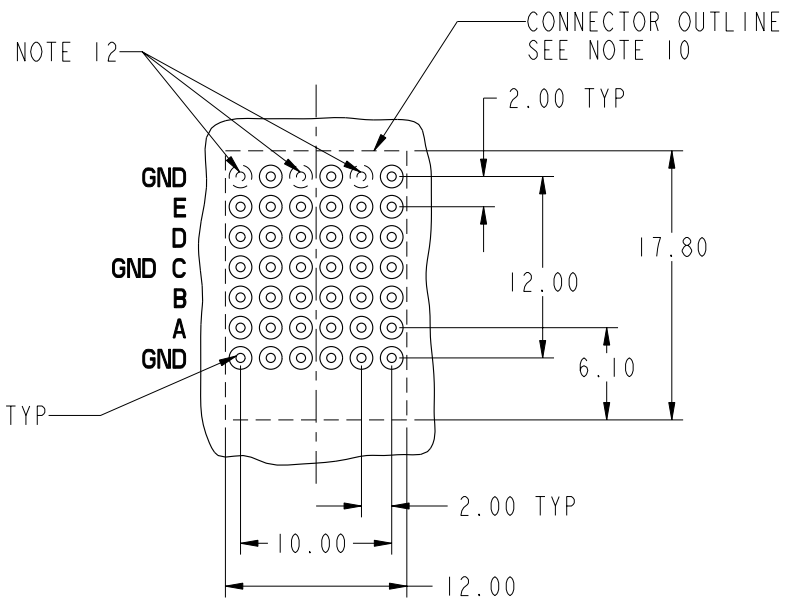
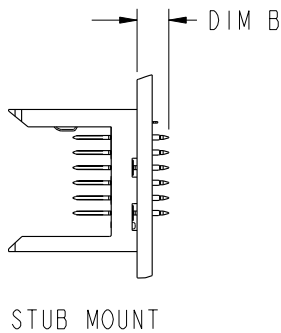
B

PRODUCT NUMBER
SEE SHEET 1

PRESS-FIT HOLES	OPTION 1
HOLE DIAMETER AFTER PLATING	0.65-0.80
DRILLED HOLE	0.81-0.86 (0.85 DRILL)
COPPER PLATING	0.025 MIN
SnPb PLATING	0.005-0.015



SEE PRINT 58351 FOR ADDITIONAL PCB INFORMATION



RECOMMENDED PCB HOLE PATTERN
(COMPONENT SIDE)

mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER	FCj www.fciconnect.com		
ltr	ecm no.	dr	date	linear	0.X ± 0.3	COPY	title		
R					0.XX ± 0.13	projection	VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.		
				angles	0.XXX ± .051		product family		
					0° ± 2°		MM	METRAL 2000	code
				dr	E. KROPER 2001-06-20		size	dwg no	sheet
				enr	J. VOLSTORF 2001-06-20		A	55499	213
				chr	J. VOLSTORF 2001-06-20		1:1		4
				appd	J. VOLSTORF 2001-06-20				
sheet index	revision sheet								

cage code 22526

Pro/E

3

4

PDM: Rev:R

STATUS: Released

Printed: May 13, 2011

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SELECT LOAD PATTERNS							
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X001 ** SEE NOTE 14 LEAD FREE OPTION	E	02	02	02	02	02	02
	D	02	02	02	02	02	02
	C	04	04	04	04	04	04
	B	03	03	04	03	03	04
	A	03	03	04	03	03	04
	GND	02	02	02	02	02	02
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X002 SEE NOTE 14 LEAD FREE OPTION	E	03	03	03	03	03	03
	D	02	03	03	03	03	02
	C	04	04	04	04	04	04
	B	03	03	03	03	03	03
	A	03	03	03	03	03	03
	GND	02	02	02	02	02	02
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X003 SEE NOTE 14 LEAD FREE OPTION	E	02	02	02	02	02	02
	D	02	02	02	02	02	02
	C	02	02	02	02	02	02
	B	02	02	02	02	02	02
	A	02	02	02	02	02	02
	GND	-	01	01	01	01	-
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X004 SEE NOTE 14 LEAD FREE OPTION	E	02	02	02	02	02	02
	D	02	02	02	02	02	02
	C	02	02	02	02	02	04
	B	02	02	02	02	02	02
	A	02	02	02	02	02	02
	GND	02	02	02	02	02	02

SELECT LOAD PATTERNS							
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X005 SEE NOTE 14 LEAD FREE OPTION	E	02	02	02	02	02	02
	D	02	02	02	02	02	02
	C	04	02	02	02	02	02
	B	02	02	02	02	02	02
	A	02	02	02	02	02	02
	GND	02	02	02	02	02	02
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X006 ** SEE NOTE 14 LEAD FREE OPTION	E	02	02	02	02	02	04
	D	02	02	02	02	02	04
	C	02	02	02	02	02	04
	B	02	02	02	02	02	04
	A	02	02	02	02	02	04
	GND	02	02	02	02	02	02
PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
55499-X007 ** SEE NOTE 14 LEAD FREE OPTION	E	04	02	02	02	02	02
	D	04	02	02	02	02	02
	C	04	02	02	02	02	02
	B	04	02	02	02	02	02
	A	04	02	02	02	02	02
	GND	02	02	02	02	02	02

** CANNOT BE MATED WITH METRAL 4000 RECEPTACLE.

mat'l code SEE NOTE 5		tolerances unless otherwise specified		CUSTOMER	FCj www.fciconnect.com	
ltr	ecn no.	dr	date	COPY	title	
R				projection	VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.	
				linear	0.X ±0.3	
				linear	0.XX ±0.13	
				angles	0.XXX ±.051	
				angles	0° ±2°	
		dr	E. KROPER	2001-06-20	product family METRAL 2000	
		enr	J. VOLSTORF	2001-06-20	code	
		chr	J. VOLSTORF	2001-06-20	size	
		appd	J. VOLSTORF	2001-06-20	dwg no	
sheet	revision				55499	
index	sheet				213	
					sheet	
					5	



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PRODUCT NUMBER
SEE SHEET 1

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 95011-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
3. SEE FCI PUBLICATION 95011-029 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. HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, 30% GLASS FILLED, FLAME RETARDANT PER UL 94-V0.
PIN MATERIAL: PHOSPHOR BRONZE
GROUND SPRING MATERIAL: PHOSPHOR BRONZE
STRIPLINE SHIELD MATERIAL: PHOSPHOR BRONZE
6. PLATING INFORMATION: PLATING ON CONTACT AREA MEETS THE PERFORMANCE LEVELS AS SHOWN IN TABLE ON SHEET 1. PLATING ON "LF" TAILS IS Sn. PLATING ON ALL OTHER TAILS IS SnPb.
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 OPOSE 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.

11. P/N 55499-X YYY LF


12. FOR FRONT PLUG-UP APPLICATIONS, THE EVEN NUMBERED PINS IN ROW 'C' 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' 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' ROW PINS ARE COMMON TO GROUND.


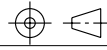

13. PRODUCTS WHERE THE PART NUMBERS ENDS IN LF MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008. ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.

14. FOR LEAD FREE PART NUMBERS ADD 'LF' SUFFIX. EXAMPLE: 55499-XYYYLF

15. PIN TYPE IS AT THE MANUFACTURERS OPTION AND CAN BE EITHER BABY-H OR EYE OF THE NEEDLE STYLE



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mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		 www.fciconnect.com		
ltr	ecr no.	dr	date	linear	0.X ±0.3		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.		
R					0.XX ±0.13		projection				
					0.XXX ±.051						
				angles	0° ±2°				product family METRAL 2000 code		
				dr	E. KROPER	2001-06-20	MM		size		
				engr	J. VOLSTORF	2001-06-20	← MM →		dwg no		
				chr	J. VOLSTORF	2001-06-20	scale		A		
				appd	J. VOLSTORF	2001-06-20	1:1		55499		
sheet index	revision sheet								213 sheet 6		