



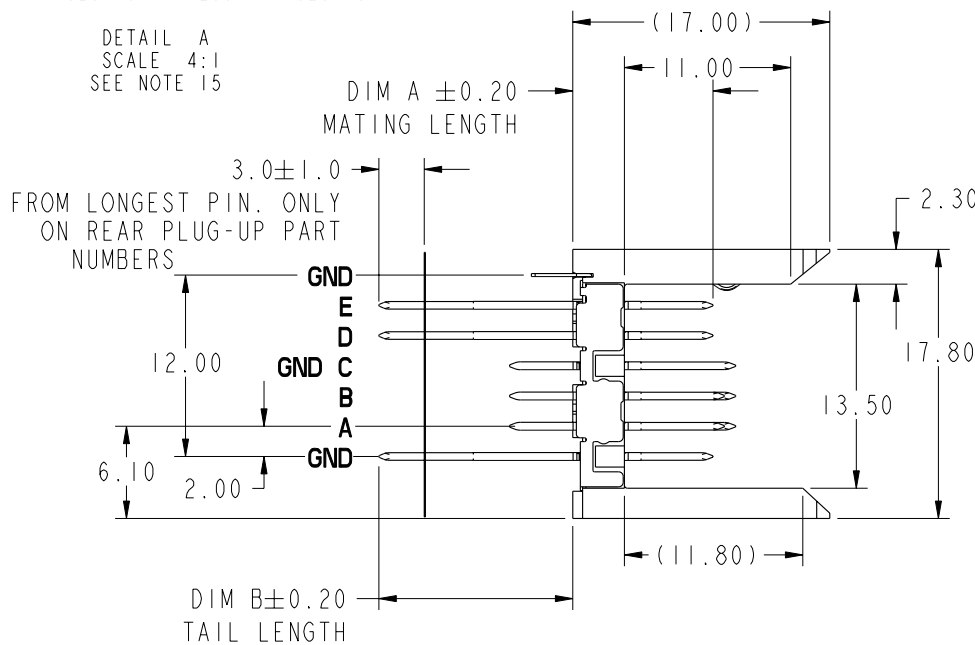
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REV E - 2008-04-18

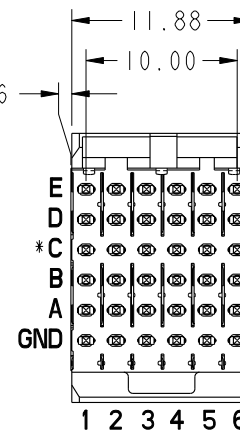
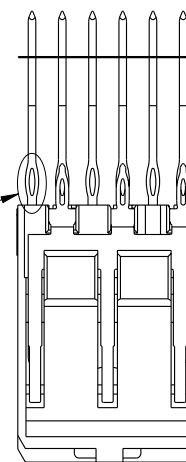
PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	APPLICATION	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
55499-1YYY	TELCORDIA CO	STANDARD	84621-101
55499-1YYYYLF		LEAD FREE	84621-101LF
55499-5YYY	TELCORDIA UE	STANDARD	84621-501
55499-5YYYYLF		LEAD FREE	84621-501LF



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

Pro/E

cage code  
22526

PDM: Rev:R

STATUS: Released

Printed: May 13, 2011



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

\* 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	ecr no.	dr	date	linear	0.X ±0.3	projection	COPY			
R					0.XX ±0.13					
					0.XXX ±.051					
				angles	0° ±2°		title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.			
				dr	E. KROPER 2001-06-20		product family		METRAL 2000	code
				enrg	J. VOLSTORF 2001-06-20		size	dwg no	213	sheet
				chr	J. VOLSTORF 2001-06-20		A		55499	2
				appd	J. VOLSTORF 2001-06-20					
sheet	revision									
index	sheet									



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	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 THAN THE OTHER PINS.

mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		FCI www.fciconnect.com	
ltr	ecr no.	dr	date	linear	0.X ± 0.3		COPY			
R					0.XX ± 0.13		projection			
					0.XXX ± 0.051					
				angles	0° ± 2°				title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.	
				dr	E. KROPER	2001-06-20	MM		product family METRAL 2000	
				enrg	J. VOLSTORF	2001-06-20	scale		code 213	
				chr	J. VOLSTORF	2001-06-20	1:1		sheet 3	
				appd	J. VOLSTORF	2001-06-20				
sheet index	revision sheet									





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		FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ± 0.3	projection	COPY	title	VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.
R					0.XX ± 0.13				
					0.XXX ± 0.051				
				angles	0° ± 2°				
				dr	E. KROPER 2001-06-20	MM scale 1:1	product family METRAL 2000	code	213
				enrg	J. VOLSTORF 2001-06-20				
				chr	J. VOLSTORF 2001-06-20				
				appd	J. VOLSTORF 2001-06-20				
sheet index	revision sheet							size	dwg no
								A	55499
								sheet	5
								cage code	22526
									4

Pro/E

3

cage code 22526

4

PDM: Rev:R

STATUS: Released

Printed: May 13, 2011

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

LEAD FREE (OPTIONAL)  
SELECT LOAD PATTERN  
PLATING CODE

- 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

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	title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD.			
R					0.XX ±0.13								
					0.XXX ±0.051								
				angles	0° ±2°				MM	product family METRAL 2000 code 213 sheet 6			
				dr	E. KROPER	2001-06-20	scale 1:1						
				enrg	J. VOLSTORF	2001-06-20							
				chr	J. VOLSTORF	2001-06-20			A	55499			
				appd	J. VOLSTORF	2001-06-20							
sheet index	revision sheet												

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