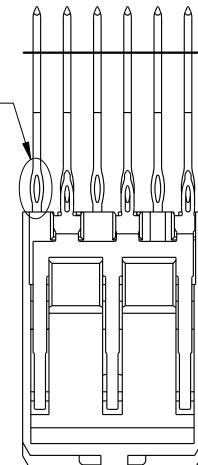
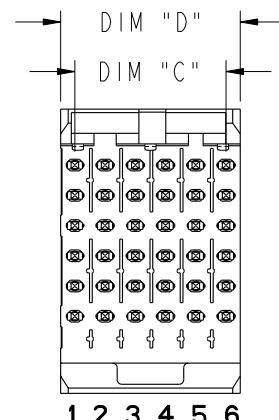


PRODUCT NUMBER	MATING CONTACT AREA PLATING PERFORMANCE	SHROUD TO USE FOR REAR-PLUG-UP APPLICATIONS	CONNECTOR SIZE	PIN FIELD DIM C	LENGTH DIM D	PRESS FIT TAIL PLATING
84881-101ZZZ	TELCORDIA CO	84818-101	1 MOD	10.00	11.88	STANDARD
84881-101ZZZLF		84818-101LF				LEAD FREE
84881-102ZZZ		84818-102	2 MOD	22.00	23.88	STANDARD
84881-102ZZZLF		84818-102LF				LEAD FREE
84881-103ZZZ		84818-103	3 MOD	34.00	35.88	STANDARD
84881-103ZZZLF		84818-103LF				LEAD FREE
84881-104ZZZ		84818-104	4 MOD	46.00	47.88	STANDARD
84881-104ZZZLF		84818-104LF				LEAD FREE
84881-501ZZZ	TELCORDIA UE	84818-101	1 MOD	10.00	11.88	STANDARD
84881-501ZZZLF		84818-101LF				LEAD FREE
84881-502ZZZ		84818-102	2 MOD	22.00	23.88	STANDARD
84881-502ZZZLF		84818-102LF				LEAD FREE
84881-503ZZZ		84818-103	3 MOD	34.00	35.88	STANDARD
84881-503ZZZLF		84818-103LF				LEAD FREE
84881-504ZZZ		84818-104	4 MOD	46.00	47.88	STANDARD
84881-504ZZZLF		84818-104LF				LEAD FREE



SEE DETA

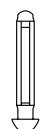
Technical drawing showing pin dimensions and mating length. The drawing illustrates a component with pins labeled A through E. Pin A is the longest, with a tail length of 3.0 ± 1.0 and a mating length of 11.00 ± 0.20 . Pins B, C, D, and E are shorter, with a total height of 12.00 and a ground connection point. The total width of the component is 17.00 . The distance from the longest pin to the ground connection is 7.10 , and the distance from the ground connection to the shortest pin is 2.00 . The total height of the component is 18.80 , and the tail length of the shortest pin is 14.50 . The mating length for pins B, C, D, and E is 11.80 ± 0.20 .



1 2 3 4 5 6



EYE OF NEEDLE
PRESS FIT SECTION



BABY-H
S FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 17

mat'l code SEE NOTE 5				tolerances unless otherwise specified				CUSTOMER				www.fciconnect.com	
Itr	ecn no.	dr	date	0. X ± 0.3				COPY					
M	V06-0569	DCH	2006-06-12	linear 0. XX ± 0.13				projection		title VERTICAL SIGNAL HDR 5 ROW			
N	V07-0179	DCH	2007-04-18	. XXX ± 0.051						P.F. SPECIAL LOAD EXT.			
P	V08-0029	HTB	2008-01-21	angles 0° ± 2°									
R	V08-0131	LP	2008-03-24	dr	E. KROPER	2001-01-23			product family		METRAL 1000	code	
-	-	-	-	engr	J. VOLSTORF	2001-01-23			size	dwg no		8488	213
K	V04-0399	DAI	2004-05-24	chr	J. VOLSTORF	2001-01-23	scale		:		A	sheet	
L	V05-0806	VS	2005-09-22	oppd	J. VOLSTORF	2001-01-23						8488	1 of 6
sheet	revision		R	R	R	R	R						
index	sheet		1	2	3	4	5	6					

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 84854 METRAL 1000 SERIES RECEPTACLE		WHEN MATING TO A 52062 METRAL 4000 SERIES 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
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.

mat'l code				SEE NOTE 5		tolerances unless otherwise specified		CUSTOMER COPY	 www.fciconnect.com
ltr	ecn no.	dr	date			0.0 ± 0.3	projection		
R						0.00 ± 0.13			
						.XXX ± .051			
						0° ± 2°			
				dr	E. KROPER.	2001-01-23	MM		product family METRAL 1000
				engr	J. VOLSTORF	2001-01-23			code 213
				chr	J. VOLSTORF	2001-01-23			size dwg no
				oppd	J. VOLSTORF	2001-01-23	scale		sheet 2
							I : I	A 84881	
		sheet	revision						
		index	sheet						

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 84854 METRAL 1000 SERIES RECEPTACLE		WHEN MATING TO A 52062 METRAL 4000 SERIES 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 THEN THE OTHER PINS.

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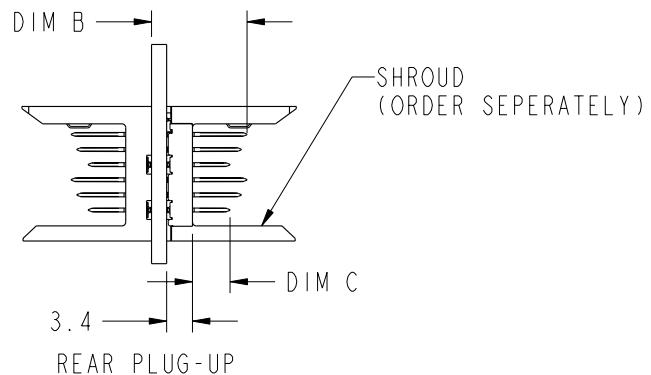
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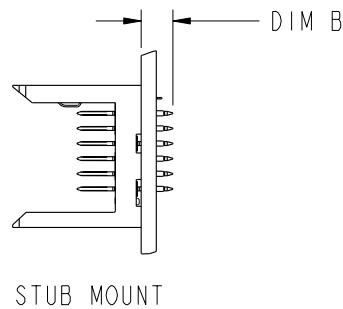


1 | 2

PRODUCT NUMBER
SEE SHEET 1



A



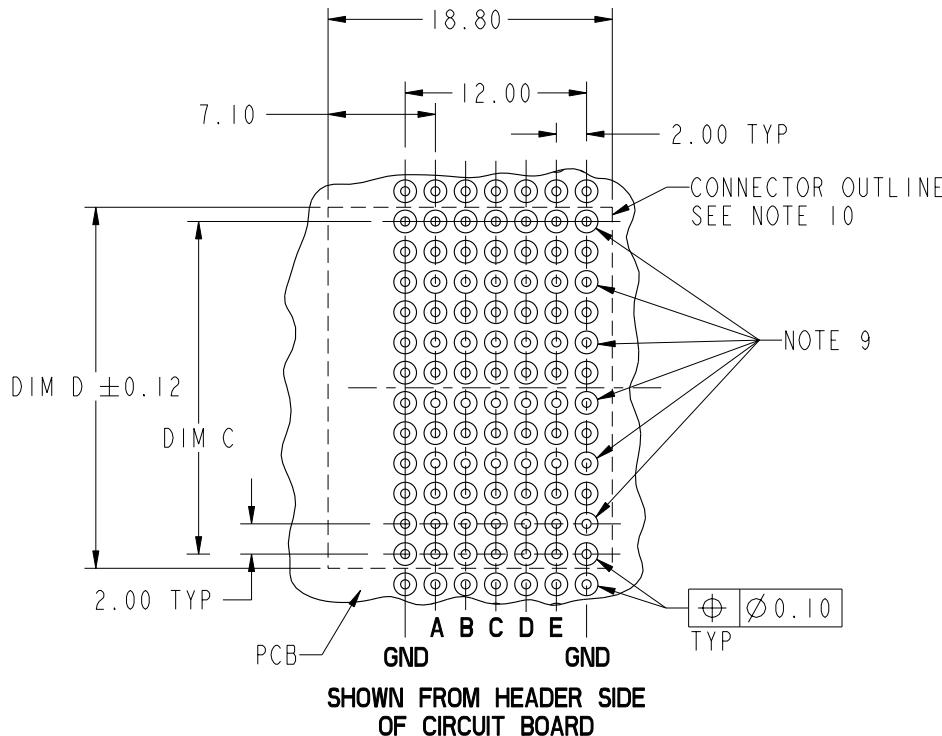
A

3 |

4

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

SEE PRINT 58351 FOR ADDITIONAL
PCB INFORMATION.



A

mat'l code	SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER COPY	title
ltr	ecn no.	dr	date		0. X ± 0.3			
R					0. XX ± 0.13		projection	VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.
					. XXX $\pm .051$			
					0° $\pm 2°$			
		dr	E. KROPER.	2001-01-23			product family	METRAL 1000
		engr	J. VOLSTORF	2001-01-23			code	213
		chr	J. VOLSTORF	2001-01-23			size	dwg no
		appd	J. VOLSTORF	2001-01-23			A	84881
sheet	revision						scale	
index	sheet							

1 | 2

Pro/E

3 |

cage code

22526

4



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SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84881-XYY001 SEE NOTE 16 LEAD FREE OPTION	E	01
	D	
	C	
	B	
	A	
	GND	
84881-XYY011 SEE NOTE 16 LEAD FREE OPTION	E	02
	D	
	C	
	B	
	A	
	GND	
84881-XYY021 SEE NOTE 16 LEAD FREE OPTION	E	03
	D	
	C	
	B	
	A	
	GND	
84881-XYY050 *RPU ** SEE NOTE 16 LEAD FREE OPTION	E	19
	D	
	C	
	B	
	A	
	GND	

* REAR PLUG-UP PART NUMBERS

** CANNOT BE MATED WITH
METRAL 4000 RECEPTACLE.

mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER		www.fciconnect.com			
Itr	ecn no.	dr	date	linear	0. X ± 0.3				COPY		
R					0. XX ± 0.13	projection	title	VERTICAL SIGNAL HDR 5 ROW P. F. SPECIAL LOAD EXT.			
					.XXX ± .051						
				angles	0° ± 2°						
		dr	E. KROPER		2001-01-23	MM	product family	METRAL 1000	code		
		engr	J. VOLSTORF		2001-01-23				size	dwg no	213
		chr	J. VOLSTORF		2001-01-23						
		appd	J. VOLSTORF		2001-01-23						
sheet		revision									
index		sheet									
								code	code		

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 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 Y14.5M, 1994

5. HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, 30% GLASS FILLED, FLAME RETARDANT PER UL 94-V0.
PIN MATERIAL: PHOSPHER BRONZE
GROUND SPRING MATERIAL: PHOSPHER 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 COMPLIANT 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.

11. CURRENT RATING : 1 AMP PER PIN

12. TEMPERATURE RANGE : -55°C TO +105°C

13. P/N 84881-XYYYYZZLF



14. P/N 84881-X01ZZZ SHOWN.

15. 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.

16. FOR LEAD FREE PART NUMBERS ADD 'LF' SUFFIX.
EXAMPLE: 84881-XXXXLF

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

mat'l code				tolerances unless otherwise specified				CUSTOMER		FCI	
litr	ecn no.	dr	date		0.0 ± 0.3			COPY			www.fciconnect.com
R				linear	0.00 ± 0.13			projection			
					0.000 ± 0.051						
				angles	0° ± 2°						
				dr	E. KROPER.	2001-01-23		MM			product family METRAL 1000 code
				engr	J. VOLSTORF	2001-01-23					size dwg no 213
				chr	J. VOLSTORF	2001-01-23	scale				sheet 6
				appd	J. VOLSTORF	2001-01-23		1 : 1			
sheet index		revision sheet									

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

FCI:

[84881-102001LF](#) [84881-101001](#) [84881-101001LF](#)