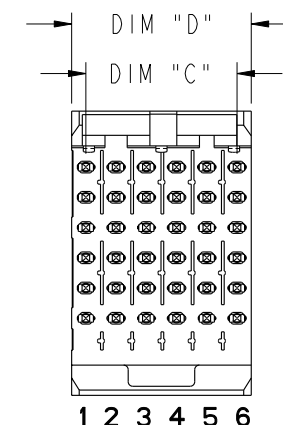
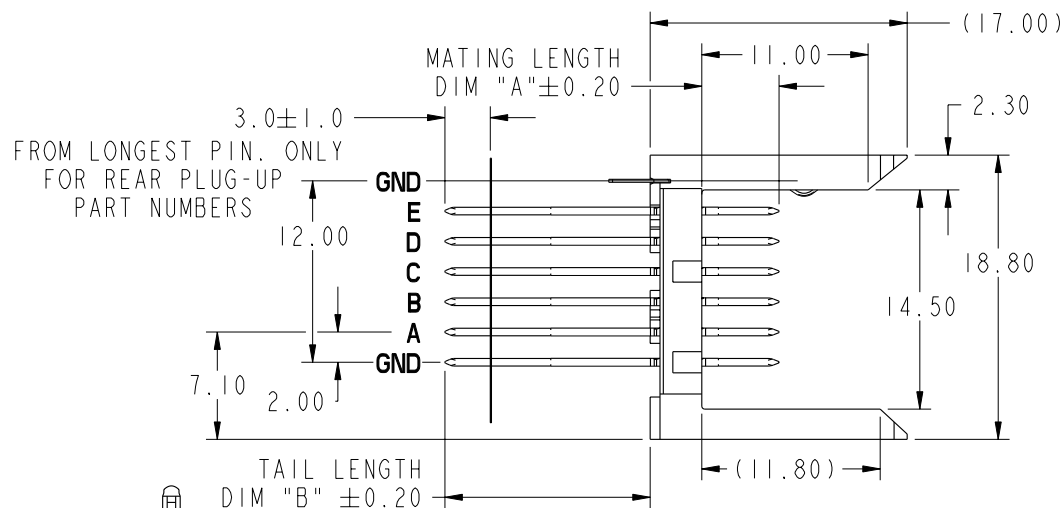
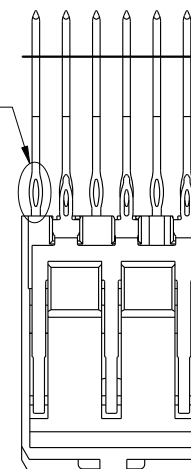




PRODUCT NUMBER	MATING CONTACT AREA PLATING PERFORMANCE	SHROUD TO USE FOR REAR-PLUG- UP APPLICATIONS	CONNECTOR SIZE	PIN FIELD DIM C	LENGTH DIM D	PRESS FIT TAIL PLATING
84881-101ZZZ	TELCORDIA CO	84818-101	1 MOD	10.00	11.88	STANDARD
84881-101ZZZLF		84818-101LF				LEAD FREE
84881-102ZZZ		84818-102	2 MOD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



DETAIL A  
SCALE 4:1  
SEE NOTE 17

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	COPY		projection		title		VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.	
M	V06-0569	DCH	2006-06-12	linear	0.XX ±0.13	MM		scale		product family		METRAL 1000	
N	V07-0179	DCH	2007-04-18	linear	.XXX ±.051	A		size		dwg no		84881	
P	V08-0029	HTB	2008-01-21	angles	0° ±2°	1:1		code		213		sheet	
R	V08-0131	LP	2008-03-24	dr	E. KROPER. 2001-01-23	A		1 of 6		cage code		22526	
-	-	-	-	enrg	J. VOLSTORF 2001-01-23	A		A		A		A	
K	V04-0399	DAI	2004-05-24	chr	J. VOLSTORF 2001-01-23	A		A		A		A	
L	V05-0806	VS	2005-09-22	appd	J. VOLSTORF 2001-01-23	A		A		A		A	
sheet index	revision sheet	R	R	R	R	R	R	R	R	R	R	R	R
1	2	3	4	5	6								

Pro/E

3

cage code 22526

4

PDM: Rev:R

STATUS: Released

Printed: May 13, 2011



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	FCI www.fciconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3	projection 	title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.	product family METRAL 1000
R					0.XX ±0.13			
					.XXX ±.051			
				angles	0° ±2°	MM ←→ scale 1:1	size A	code 213 sheet 2
				dr	E. KROPER. 2001-01-23			
				enrg	J. VOLSTORF 2001-01-23			
				chr	J. VOLSTORF 2001-01-23			
				appd	J. VOLSTORF 2001-01-23			
sheet index	revision sheet							



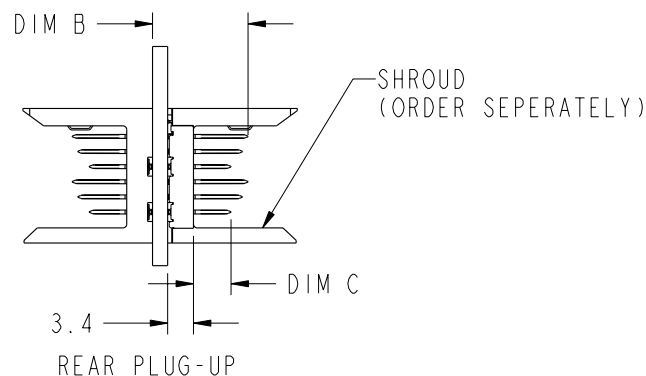
PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 84854 METRAL 1000 SERIES RECEPTACLE		WHEN MATING TO A 52062 METRAL 4000 SERIES RECEPTACLE		
			ROWS A,B,C,D,E	GROUND ROW	ROWS:A,B,D,E	ROW C	GROUND ROW
04*	7.25	4.30	1.60 MIN	1.60 MIN	1.60 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.

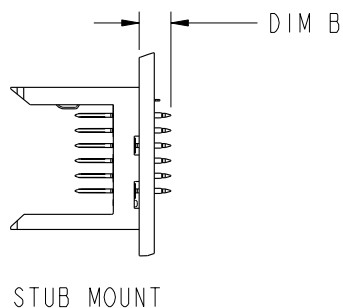
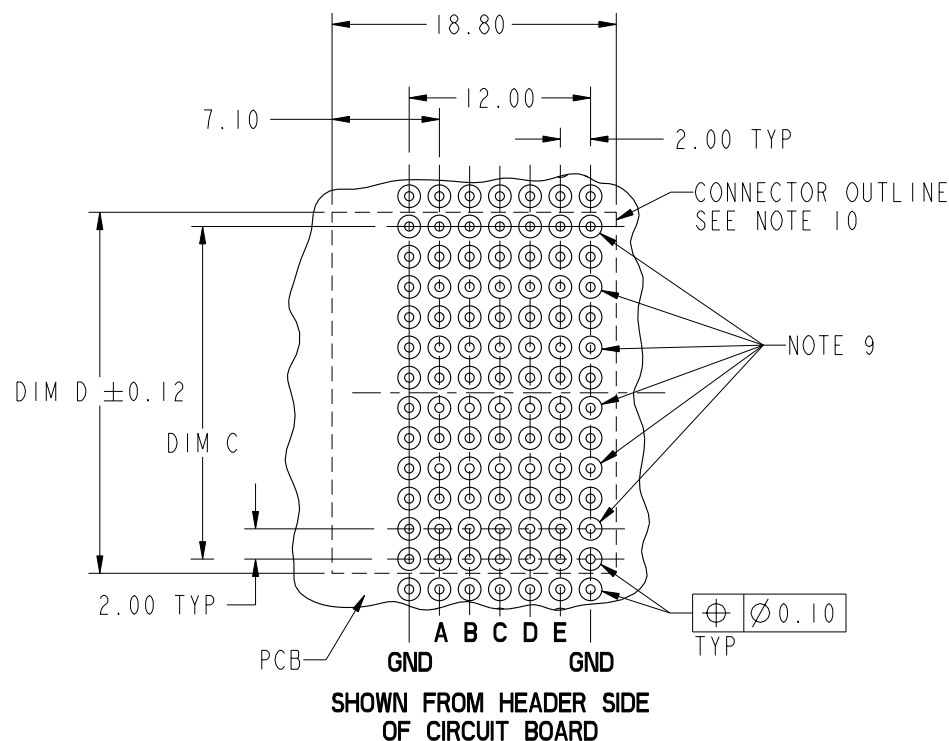
mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		FCI www.fciconnect.com		
ltr	ecn no.	dr	date	linear	0.X ±0.3		projection	title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.			
R					0.XX ±0.13						
					.XXX ±.051						
				angles	0° ±2°		 MM  1:1	product family		METRAL 1000	code
				dr	E. KROPER.	2001-01-23		size	dwg no	213	sheet
				enrg	J. VOLSTORF	2001-01-23		A	84881	3	
				chr	J. VOLSTORF	2001-01-23					
				appd	J. VOLSTORF	2001-01-23					
sheet	revision										
index	sheet										

PRODUCT NUMBER  
SEE SHEET 1

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



SEE PRINT 58351 FOR ADDITIONAL  
PCB INFORMATION.



mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER		FCI www.fciconnect.com	
ltr	ecr no.	dr	date	linear	0.X $\pm 0.3$	projection	COPY	title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.	
R					0.XX $\pm 0.13$				
					.XXX $\pm .051$				
				angles	0° $\pm 2^\circ$	MM 1:1	scale	product family METRAL 1000	
				dr	E. KROPER. 2001-01-23			size A	code 213
				enrg	J. VOLSTORF 2001-01-23				sheet 4
				chr	J. VOLSTORF 2001-01-23	A	84881		
				appd	J. VOLSTORF 2001-01-23				
sheet index	revision sheet							cage code 22526	

This document is the property of and embodies  
CONFIDENTIAL and PROPRIETARY information of FCI.  
No part of the information shown on this  
document may be used in any way or disclosed  
to others without the written consent of FCI.  
Copyright FCI.


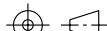
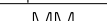


SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
84881-XY001 SEE NOTE 16 LEAD FREE OPTION	E	01
	D	
	C	
	B	
	A	
	GND	
84881-XY011 SEE NOTE 16 LEAD FREE OPTION	E	02
	D	
	C	
	B	
	A	
	GND	01
84881-XY021 SEE NOTE 16 LEAD FREE OPTION	E	03
	D	
	C	
	B	
	A	
	GND	01
84881-XY050 *RPU ** SEE NOTE 16 LEAD FREE OPTION	E	19
	D	
	C	
	B	
	A	
	GND	02

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

\* 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				
ltr	ecn no.	dr	date	linear	0. X ±0.3			COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.			
R					0. XX ±0. 13			projection					
					. XXX ±. 051								
				angles	0° ±2°			 MM scale 1 : 1		product family		METRAL 1000	code
				dr	E. KROPER.	2001-01-23	size			dwg no		213	
				enrg	J. VOLSTORF	2001-01-23	A			84881	sheet	5	
				chr	J. VOLSTORF	2001-01-23							
				appd	J. VOLSTORF	2001-01-23							
sheet index	revision sheet												

cage code 22526

Pro/E

3

4

PDM: Rev:R

STATUS: Released Printed: May 13, 2011

PRODUCT NUMBER

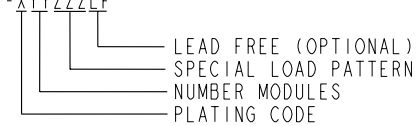
SEE SHEET 1

## NOTES:


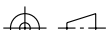

- SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
- SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
- SEE FCI PUBLICATION 950511-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5M, 1994
- HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, 30% GLASS FILLED, FLAME RETARDANT PER UL 94-V0.  
PIN MATERIAL: PHOSPHOR BRONZE  
GROUND SPRING MATERIAL: PHOSPHOR BRONZE
- 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.

- 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

- 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.
- 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.
- CURRENT RATING : 1 AMP PER PIN
- TEMPERATURE RANGE : -55°C TO +105°C
- P/N 84881-XXXXZLF



- P/N 84881-X01ZZZ SHOWN.
- 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.
- FOR LEAD FREE PART NUMBERS ADD 'LF' SUFFIX. EXAMPLE: 84881-XXXXLF
- 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		 www.fciconnect.com			
ltr	ecr no.	dr	date	linear	0.X ±0.3		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.		
R					0.XX ±0.13		projection				
					.XXX ±.051						
				angles	0° ±2°						
				dr	E. KROPER.	2001-01-23			product family	METRAL 1000	code
				enrg	J. VOLSTORF	2001-01-23			size	dwg no	213
				chr	J. VOLSTORF	2001-01-23			A		sheet
				appd	J. VOLSTORF	2001-01-23			84881		6
sheet index		revision sheet									

# Mouser Electronics

Authorized Distributor

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

FCI:

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