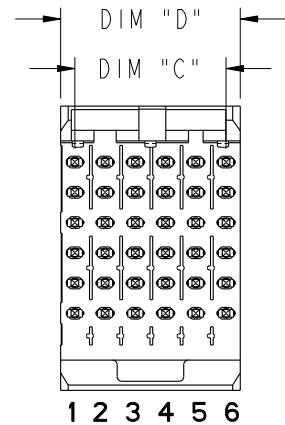
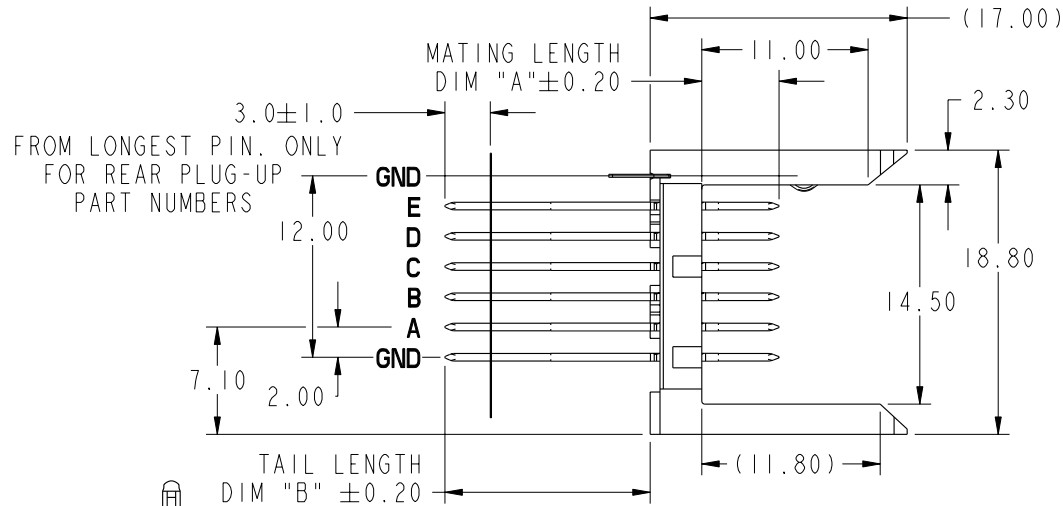
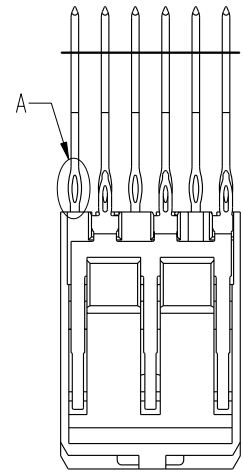


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PRODUCT NUMBER	MATING CONTACT AREA PLATING PERFORMANCE	SHROUD TO USE FOR REAR-PLUG-UP APPLICATIONS	CONNECTOR SIZE	PIN FIELD DIM C	LENGTH DIM D	PRESS FIT TAIL PLATING
84881-101ZZZ	TELCORDIA CO	84818-101	1 MOD	10.00	11.88	STANDARD
84881-101ZZZLF		84818-101LF				LEAD FREE
84881-102ZZZ		84818-102	2 MOD	22.00	23.88	STANDARD
84881-102ZZZLF						84818-102LF
84881-103ZZZ		84818-103	3 MOD	34.00	35.88	STANDARD
84881-103ZZZLF						84818-103LF
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
84881-503ZZZ		84818-103	3 MOD	34.00	35.88	STANDARD
84881-503ZZZLF						84818-103LF
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	title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.		
M	V06-0569	DCH	2006-06-12		0.XX ±0.13	projection			
N	V07-0179	DCH	2007-04-18	angles	.XXX ±.051				
P	V08-0029	HTB	2008-01-21		0° ±2°				
R	V08-0131	LP	2008-03-24	dr	E. KROPER. 2001-01-23	MM	product family	METRAL 1000	code
-	-	-	-	enrg	J. VOLSTORF 2001-01-23		size	dwg no	213
K	V04-0399	DAI	2004-05-24	chr	J. VOLSTORF 2001-01-23	scale	A	84881	sheet 1 of 6
L	V05-0806	VS	2005-09-22	appd	J. VOLSTORF 2001-01-23				
sheet index	revision sheet	R	R	R	R	R	R	R	R
		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.



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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		projection	title	
R					0.XX ±0.13		MM			VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.	
					.XXX ±.051		A			product family METRAL 1000 code	
				angles	0° ±2°		1:1		size		213
				dr	E. KROPER.	2001-01-23	scale		dwg no		sheet
				enrg	J. VOLSTORF	2001-01-23	A		84881		2
				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.

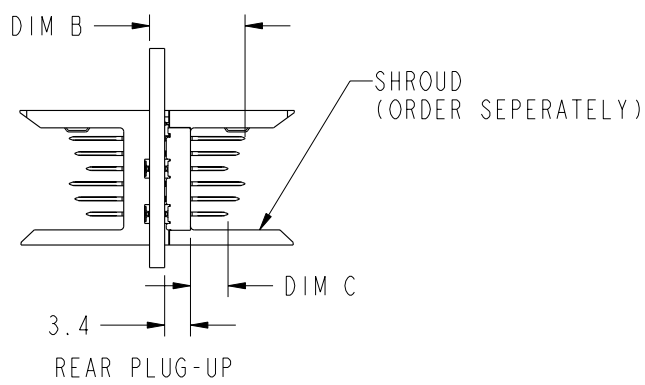
mat'l code SEE NOTE 5				tolerances unless otherwise specified		CUSTOMER	FCj www.fciconnect.com		
ltr	ecr no.	dr	date	linear	0.X ±0.3	projection	COPY		
R					0.XX ±0.13		title		VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.
					.XXX ±.051		product family		METRAL 1000
				angles	0° ±2°	MM ← MM → scale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



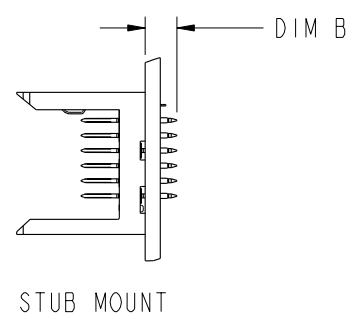
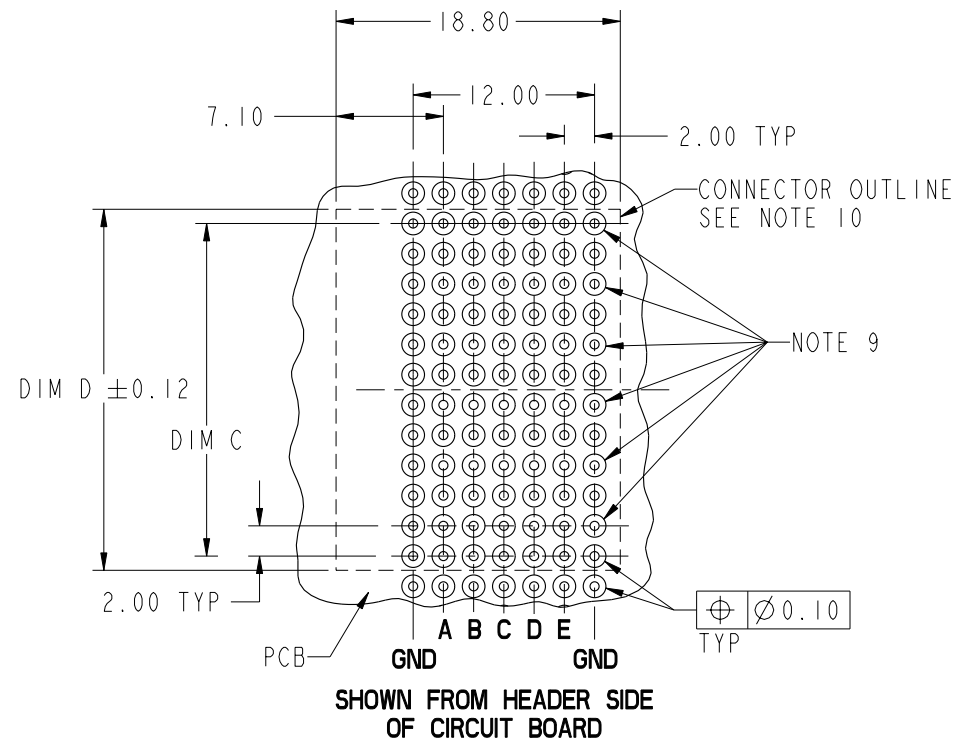
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PRODUCT NUMBER  
SEE SHEET 1

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.



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

### 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.



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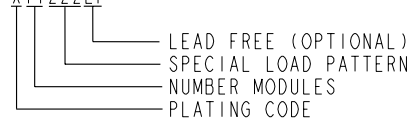
mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		www.fciconnect.com		
ltr	ecn no.	dr	date	linear	0.X ±0.3		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.		
R					0.XX ±0.13		projection				
					.XXX ±.051						
				angles	0° ±2°						
				dr	E. KROPER.	2001-01-23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

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: PHOSPHOR BRONZE  
GROUND SPRING 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.

- 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-XYZZZLF



- 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

- 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-XYYYLF
- 17. 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	FCI www.fciconnect.com				
ltr	ecr no.	dr	date	linear	0.X ±0.3	COPY	projection	title VERTICAL SIGNAL HDR 5 ROW P.F. SPECIAL LOAD EXT.			
R					0.XX ±0.13						
					.XXX ±.051						
				angles	0° ±2°	MM ←→	scale 1:1	product family METRAL 1000			
				dr	E. KROPER. 2001-01-23				size A	dwg no 84881	code 213
				enrg	J. VOLSTORF 2001-01-23						
				chr	J. VOLSTORF 2001-01-23						
				appd	J. VOLSTORF 2001-01-23						
sheet index	revision sheet							sheet 6			