

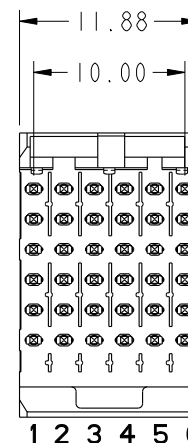
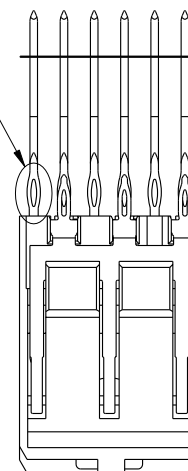
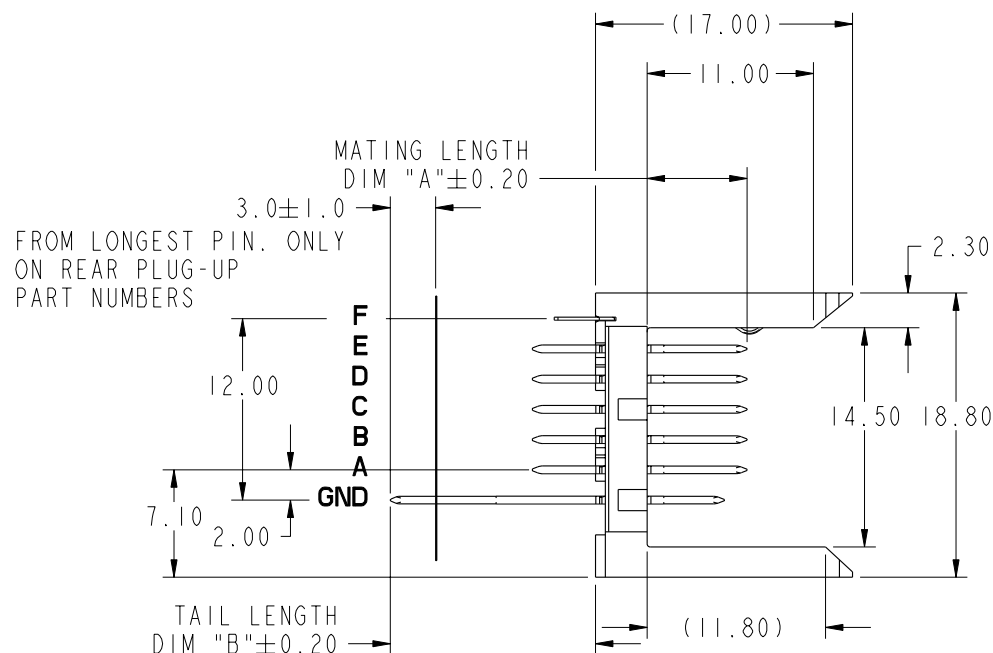


PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	PRESS FIT TAIL PLATING
98122-1ZZZ	TELCORDIA CO	STANDARD
98122-1ZZZLF		LEAD FREE
98122-5ZZZ	TELCORDIA UE	STANDARD
98122-5ZZZLF		LEAD FREE

EYE OF NEEDLE
PRESS FIT SECTION

BABY-H
PRESS FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 17



mat'l code SEE NOTE 5				tolerances unless otherwise specified				CUSTOMER		 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 EXT	product family METRAL 1000 size A		code 213 sheet 1 of 6
J	V06-0573	DCH	2006-06-14		0.XX ±0.13							
K	V07-0177	DCH	2007-04-17	angles	.XXX ±.051			MM scale 1:1	dwg no 98122			
L	V08-0029	HTB	2008-01-21		0° ±2°							
M	V08-0131	LP	2008-03-24	dr	E. KROPER.	2001-01-25	J. VOLSTORF 2001-01-25					
-	-	-	-	enrg	J. VOLSTORF	2001-01-25						
G	V04-0399	DAI	2004-05-24	chr	J. VOLSTORF	2001-01-25	J. VOLSTORF 2001-01-25					
H	V05-0806	VS	2005-09-21	appd	J. VOLSTORF	2001-01-25						
sheet index		revision sheet		M	M	M	M	M	M			
				1	2	3	4	5	6			

Pro/E

cage code 22526

PDM: Rev:M

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 SERIES RECEPTACLE		WHEN MATING TO A 52062 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
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	ecn no.	dr	date	linear	0.X ±0.3	projection	COPY	title	VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD EXT.	
M					0.XX ±0.13					
					.XXX ±.051					
				angles	0° ±2°	 MM 1:1	product family	METRAL 1000	code	
			dr	E. KROPER.	2001-01-25					
			enrg	J. VOLSTORF	2001-01-25					
			chr	J. VOLSTORF	2001-01-25					
			appd	J. VOLSTORF	2001-01-25					
sheet index	revision sheet							size	dwg no	213
								A	98122	sheet 2



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

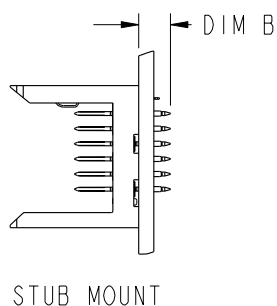
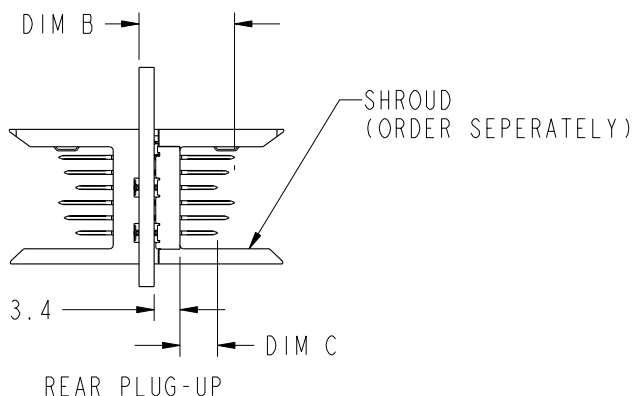
* STUB PINS - NO REAR PLUG-UP

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

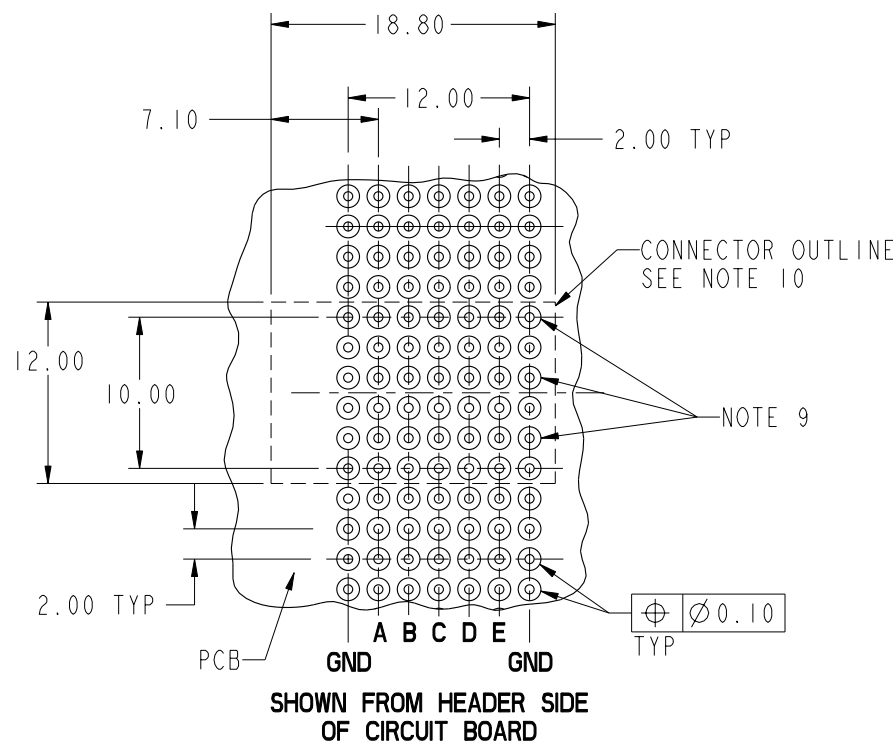
mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3		COPY			
M					0.XX ±0.13		projection			
					.XXX ±.051					
				angles	0° ±2°				title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD EXT.	
				dr	E. KROPER.	2001-01-25	MM		product family METRAL 1000	
				enrg	J. VOLSTORF	2001-01-25			code 213	
				chr	J. VOLSTORF	2001-01-25	1:1		sheet 3	
				appd	J. VOLSTORF	2001-01-25				
sheet index	revision 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 58531 FOR ADDITIONAL PCB
INFORMATION



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 EXT.
M					0.XX ± 0.13				
					.XXX ± .051				
				angles	0° ± 2°	MM scale 1:1	product family METRAL 1000 size A	code 213 sheet 4	98122
				dr	E. KROPER. 2001-01-25				
				engr	J. VOLSTORF 2001-01-25				
				chr	J. VOLSTORF 2001-01-25	cage code	22526	4	3
				appd	J. VOLSTORF 2001-01-25				
sheet index	revision sheet								

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PRODUCT NUMBER

SEE SHEET 1

NOTES:

1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CURCUIT 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 98122-XZZZLF



14. P/N 98122-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: 98122-XXXXLF

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

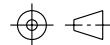
mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		 www.fciconnect.com				
ltr	ecr no.	dr	date	linear	0.X ±0.3			COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD EXT.			
M					0.XX ±0.13			projection					
					.XXX ±.051								
				angles	0° ±2°								
				dr	E. KROPER.	2001-01-25			product family		METRAL 1000	code	
				enrg	J. VOLSTORF	2001-01-25			size		dwg no	213	
				chr	J. VOLSTORF	2001-01-25			A		98122		sheet
				appd	J. VOLSTORF	2001-01-25							5
sheet index		revision sheet											



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SELECT LOAD PATTERN

PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
98122-X001 SEE NOTE 16 LEAD FREE OPTION	E	03	03	03	03	03	03
	D	02	03	03	03	03	03
	C	03	03	03	03	03	03
	B	03	03	03	03	03	03
	A	03	03	03	03	03	03
	GND	01	01	01	01	01	01

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 EXT.				
M					0. XX ±0.13			projection 						
					.XXX ±.051									
				angles	0° ±2°					product family		METRAL 1000	code	
				dr	E. KROPER.	2001-01-25	size			dwg no		213		
				enrg	J. VOLSTORF	2001-01-25	scale 1:1			A		98122		
				chr	J. VOLSTORF	2001-01-25								
				appd	J. VOLSTORF	2001-01-25								
sheet index	revision sheet													

Pro/E

cage code 22526

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