

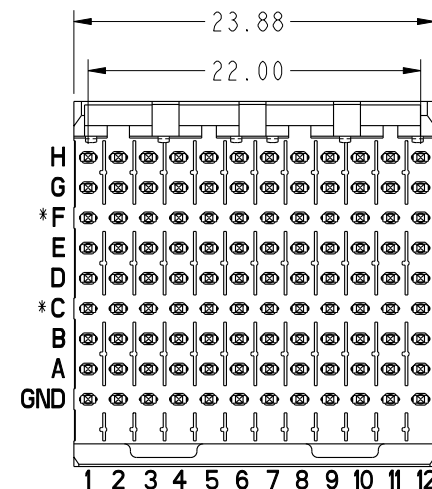
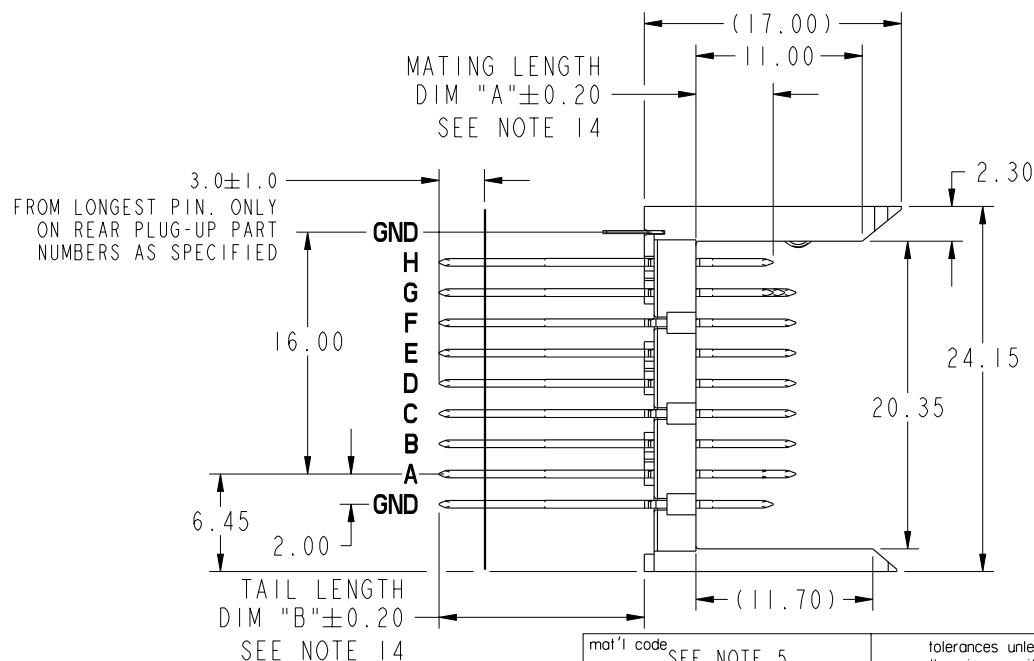
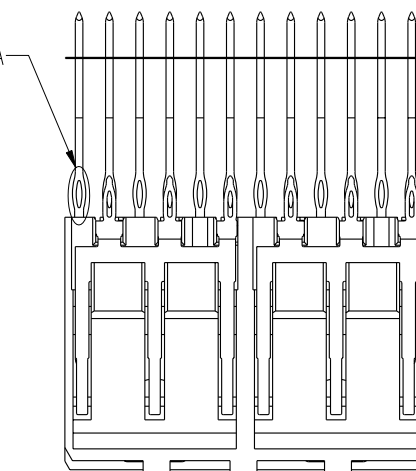


PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
63784-1YYY	TELCORDIA CO	74993-102
63784-1YYLFF	TELCORDIA CO	84625-102LF
63784-5YYY	TELCORDIA UE	74993-502
63784-5YYLFF	TELCORDIA UE	84625-502LF
63784-9YYY	TELCORDIA CO	74993-102
63784-9YYLFF	TELCORDIA CO	84625-102LF
63784-AYYY	CUSTOMER SPECIAL	74993-102
63784-AYYLFF	CUSTOMER SPECIAL	84625-102LF

EYE OF NEEDLE
PRESS FIT SECTION

BABY-H
PRESS FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 16



mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER			FCI		
ltr	ecn no.	dr	date	linear	0.X ± 0.3		COPY			www.fciconnect.com		
AH	V06-0498	DCH	2006-05-30		0.XX ± 0.13		projection			title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.		
AJ	V07-0169	DCH	2007-03-27		.XXX ± 0.051							
AK	V08-0016	HTB	2008-01-10	angles	0° $\pm 2^\circ$					product family METRAL 1000 code size dwg no 213 A 63784 sheet 1 of 10		
AL	V08-0051	LP	2008-02-19	dr	E. KROPER. 2001-01-10		MM					
-	-	-	-	enrg	J. VOLSTORF 2001-01-10		scale			cage code 22526		
AF	V05-1022	LP	2005-11-08	chr	J. VOLSTORF 2001-01-10		1:1					
AG	V05-1125	LP	2005-12-19	appd	J. VOLSTORF 2001-01-10							
sheet index	revision sheet	AL	AL	AL	AL	AL	AL	AL	AL	AL	AL	AL
		1	2	3	4	5	6	7	8	9	10	

Pro/E

cage code 22526

PDM: Rev:AL

STATUS: Released

Printed: Dec 16, 2008



PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 74981 SERIES RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B, C,D,E,F,G & H	GROUND ROW	ROWS:A,B, D,E,G & H	ROW C & F	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

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 8 ROW P.F. 96 POS. SELECT LOAD EXT.				
AL					0.XX ±0.13							
					.XXX ±.051							
				angles	0° ±2°							
				dr	E. KROPER. 2001-01-10	 scale 1:1		product family	METRAL 1000	code	213	
				engr	J. VOLSTORF 2001-01-10			size	dwg no	63784	sheet	2
				chr	J. VOLSTORF 2001-01-10			A				
				appd	J. VOLSTORF 2001-01-10							
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 74981 SERIES RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C, D,E,F,G & H	GROUND ROW	ROWS:A,B, D,E,G & H	ROW C & F	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

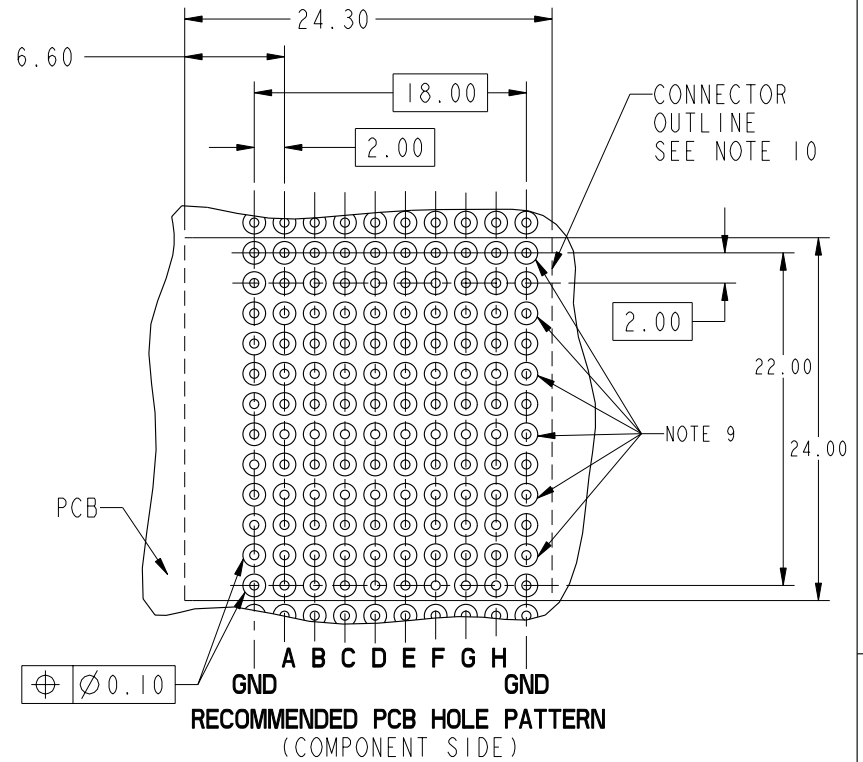
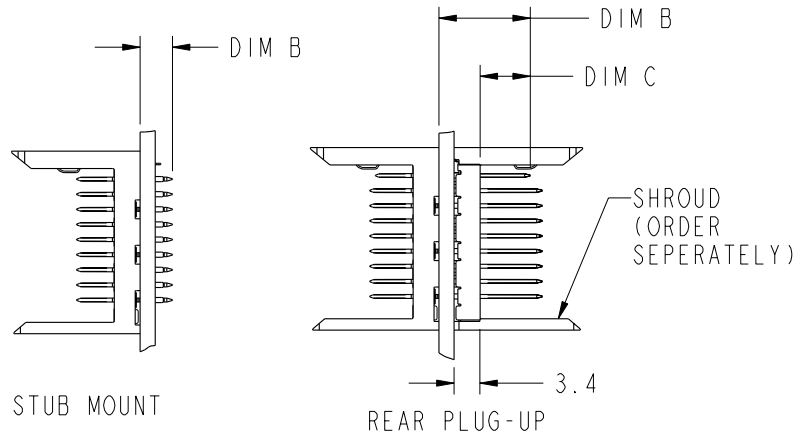
* STUB PINS - NO REAR PLUG-UP

** 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 8 ROW P.F. 96 POS. SELECT LOAD EXT.		
AL					0.XX ±0.13					
					.XXX ±.051					
				angles	0° ±2°		MM ←→ scale 1:1	product family		METRAL 1000
				dr	E. KROPER.	2001-01-10		size	dwg no	213
				engr	J. VOLSTORF	2001-01-10		A	63784	sheet 3
				chr	J. VOLSTORF	2001-01-10				
				appd	J. VOLSTORF	2001-01-10				
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 58351 FOR
ADDITIONAL PCB INFO.

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		title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.			
AL					0. XX ± 0.13				projection					
					. XXX ± .051									
				angles	0° ± 2°									
		dr			E. KROPER.	2001-01-10			product family		METRAL 1000		code	
		enrg			J. VOLSTORF	2001-01-10			size		dwg no		213	
		chr			J. VOLSTORF	2001-01-10			scale		A		63784	
		appd			J. VOLSTORF	2001-01-10	1:1						sheet 4	
sheet index	revision sheet													

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 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES 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 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-H
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-H
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, G & H
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROW C & F
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, G & H
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROW C & F
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 63784-XXXXLF



14. AFTER INSERTION INTO CIRCUIT BOARD WITH QUALIFIED TOOL.
 15. PRODUCTS WHERE THE PART NUMBER 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. 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		COPY		title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.			
AL					0. XX ±0.13		projection					
					.XXX ±.051							
				angles	0° ±2°							
				dr	E. KROPER.	2001-01-10	MM		product family		METRAL 1000	code
				enrg	J. VOLSTORF	2001-01-10			size		dwg no	213
				chr	J. VOLSTORF	2001-01-10	scale		A		63784	sheet
				appd	J. VOLSTORF	2001-01-10	1:1					5
sheet index	revision sheet											



METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X001	H	01	01	01	01	01	01	01	01	01	01	01	01
	G	01	01	01	01	01	01	01	03	03	03	01	19
	F	01	01	01	01	01	19	01	01	01	01	01	19
	E	01	01	01	01	01	19	01	03	03	03	01	19
	D	01	01	01	01	01	19	01	01	01	01	01	19
	C	01	01	01	01	01	19	01	01	01	01	01	19
	B	01	01	01	01	01	19	01	01	01	01	01	19
	A	01	01	01	01	01	01	01	01	01	01	01	19
	GND	01	01	01	01	01	01	01	01	01	01	01	01

CANNOT BE MATED
TO A METRAL 4000
RECEPTACLE

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X002 RPU	H	05	05	05	05	05	05	05	05	05	05	05	05
	G	05	05	05	05	05	05	05	05	05	05	05	05
	F	05	05	05	05	05	05	05	05	05	05	05	05
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	01	01	01	01	01	01	01	01	01	01	01	01
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X003 RPU	H	01	01	01	01	01	01	01	01	01	01	01	01
	G	01	01	01	01	01	01	01	01	01	01	01	01
	F	01	01	01	01	01	01	01	01	01	01	01	01
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	05	05	05	05	05	05	05	05	05	05	05	05
	C	05	05	05	05	05	05	05	05	05	05	05	05
	B	05	05	05	05	05	05	05	05	05	05	05	05
	A	05	05	05	05	05	05	05	05	05	05	05	05
	GND	01	01	01	01	01	01	01	01	01	01	01	01

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X004	H	01	01	01	01	01	01	01	01	01	01	01	01
	G	01	01	01	01	01	01	03	03	03	03	01	19
	F	01	01	01	01	01	01	01	01	01	01	01	19
	E	01	01	01	01	01	01	03	03	03	03	01	19
	D	01	01	01	01	01	01	01	01	01	01	01	19
	C	01	01	01	01	01	01	01	01	01	01	01	19
	B	01	01	01	01	01	01	01	01	01	01	01	19
	A	01	01	01	01	01	01	01	01	01	01	01	19
	GND	01	01	01	01	01	01	01	01	01	01	01	01

CANNOT BE MATED
TO A METRAL 4000
RECEPTACLE

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X005 RPU	H	05	05	05	05	05	05	01	01	01	01	01	01
	G	05	05	05	05	05	05	01	01	01	01	01	01
	F	05	05	05	05	05	05	01	01	01	01	01	01
	E	05	05	05	05	05	05	01	01	01	01	01	01
	D	01	01	01	01	01	01	01	01	01	01	01	01
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

FOR REAR
PLUG UP
APPLICATIONS,
PCB THICK-
NESS RANGE: 2.95-5.30
WHEN MATED TO
METRAL 1000
RECEPT. AND
3.30-5.30 WHEN
MATED TO
METRAL 4000
RECEPT.
(2.30 MIN
IN NON-
STANDARD
REAR PLUG-UP
APPLICATIONS)

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X006 RPU	H	05	05	05	05	05	05	05	05	05	05	05	05
	G	05	05	05	05	05	05	05	05	05	05	05	05
	F	05	05	05	05	05	05	05	05	05	05	05	05
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	19	19	19	19	19	19	19	19	19	19	19	19
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND THIS CONFIGURATION
CANNOT BE MATED TO A
METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X007	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	02	02	02	02	02	02	02	02	02	02	02	02
	E	03	01	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	03
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X008	H	02	02	02	02	02	02	02	01	01	01	01	01
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	02	02	02	02	02	02	02	02	02	02	02	02
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X009 RPU	H	49	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49	49
	F	49	49	49	49	49	49	49	49	49	49	49	49
	E	49	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49	49
	C	49	49	49	49	49	49	49	49	49	49	49	49
	B	49	49	49	49	49	49	49	49	49	49	49	49
	A	35	49	49	49	49	49	49	49	49	49	49	49
	GND	36	36	36	36	36	36	36	36	36	36	36	36

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 4.75
-6.05 WHEN MATED TO
METRAL 1000 RECEPT.
AND 4.80-6.05 WHEN MATED
TO METRAL 4000 RECEPT.

mat'l code SEE NOTE 5				tolerances unless otherwise specified				CUSTOMER		 www.fciconnect.com	
ltr		ecn no.		dr		date		COPY		title	
AL								projection		VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.	
								0.X ±0.3			
								0.XX ±0.13			
								.XXX ±0.051			
								0° ±2°			
								dr		E. KROPER. 2001-01-10	
								enrg		J. VOLSTORF 2001-01-10	
								chr		J. VOLSTORF 2001-01-10	



A

B

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X010 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	01	02	02	02	02
	G	02	02	02	02	02	02	02	01	02	02	02	02
	F	02	02	02	02	02	02	02	02	02	02	02	02
	E	02	02	02	02	02	02	02	01	02	02	02	02
	D	02	02	02	02	02	02	02	01	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	01	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X011 FOR LEAD FREE SEE NOTE 15	H	02	03	03	03	03	03	03	03	03	03	03	03
	G	03	03	03	03	03	03	03	03	03	03	03	02
	F	03	03	03	03	03	03	03	03	03	03	03	03
	E	03	03	03	03	03	03	03	03	03	03	03	03
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	03	03	03	03	03	03	03	03	03	03	03	03
	B	03	03	03	03	03	03	03	03	03	03	03	03
	A	03	03	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02	02

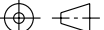
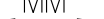
METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X012 RPU FOR LEAD FREE SEE NOTE 15	H	45	45	45	45	45	45	45	45	45	45	22	
	G	45	45	45	45	45	45	45	45	45	45	45	
	F	22	45	45	45	45	45	45	45	45	45	45	
	E	45	45	45	45	45	45	45	45	45	45	45	
	D	45	45	45	45	45	45	45	45	45	45	45	
	C	45	45	45	45	45	45	45	45	45	45	45	
	B	45	45	45	45	45	45	45	45	45	45	45	
	A	47	47	47	47	47	47	47	47	47	47	47	
	GND	22	22	22	22	22	22	22	22	22	22	22	

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X013 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	02	02	02	02	02	02	02	02	02	02	02	02
	E	03	02	02	02	01	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X014 FOR LEAD FREE SEE NOTE 15	H	03	03	03	03	03	03	03	03	03	03	03	01
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	01	03	03	03	03	03	03	03	03	03	03	03
	E	03	03	03	03	03	03	03	03	03	03	03	03
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	03	03	03	03	03	03	03	03	03	03	03	03
	B	03	03	03	03	03	03	03	03	03	03	03	03
	A	19	19	19	19	19	19	19	19	19	19	19	19
	GND	01	01	01	01	01	01	01	01	01	01	01	01

FOR REAR PLUG UP
APPLICATIONS. PCB
THICKNESS RANGE: 2.95
-3.80 WHEN MATED TO
METRAL 1000 RECEPT.
AND THIS CONFIGURATION
CANNOT BE MATED TO A
METRAL 4000 RECEPT.

CAN NOT
BE MATED
TO A
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		
AL					0.XX ±0.13				title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT		
					.XXX ±.051						
				angles	0° ±2°			 MM scale 1:1	product family METRAL 1000		
					dr E. KROPER. 2001-01-10				code 213		
					enrg J. VOLSTORF 2001-01-10				size dwg no 63784		
				chr J. VOLSTORF 2001-01-10	2001-01-10			sheet 7			
					appd J. VOLSTORF 2001-01-10						
sheet index		revision sheet									

Pro/E

3

cage code 22526

4

PDM: Rev:AL

STATUS:Released

Printed: Dec 16, 2008



A

B

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X028 RPU FOR LEAD FREE SEE NOTE 15	H	05	05	05	05	05	05	05	05	05	05	05	05
	G	05	05	05	05	05	05	05	05	05	05	05	05
	F	05	05	05	05	05	05	05	05	05	05	05	05
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	01	01	01	01	01	01	01	01	01	01	01	01
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X029 RPU FOR LEAD FREE SEE NOTE 15	H	01	01	01	01	01	01	01	01	01	01	01	01
	G	01	01	01	01	01	01	01	01	01	01	01	01
	F	01	01	01	01	01	01	01	01	01	01	01	01
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	05	05	05	05	05	05	05	05	05	05	05	05
	C	05	05	05	05	05	05	05	05	05	05	05	05
	B	05	05	05	05	05	05	05	05	05	05	05	05
	A	05	05	05	05	05	05	05	05	05	05	05	05
	GND	01	01	01	01	01	01	01	01	01	01	01	01

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X030 RPU FOR LEAD FREE SEE NOTE 15	H	05	05	05	05	05	05	01	01	01	01	01	01
	G	05	05	05	05	05	05	01	01	01	01	01	01
	F	05	05	05	05	05	05	01	01	01	01	01	01
	E	05	05	05	05	05	05	01	01	01	01	01	01
	D	01	01	01	01	01	01	01	01	01	01	01	01
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X031 RPU FOR LEAD FREE SEE NOTE 15	H	05	05	05	05	05	05	05	05	05	05	05	05
	G	05	05	05	05	05	05	05	05	05	05	05	05
	F	05	05	05	05	05	05	05	05	05	05	05	05
	E	05	05	05	05	05	05	05	05	05	05	05	05
	D	19	19	19	19	19	19	19	19	19	19	19	19
	C	01	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01	01

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X032 RPU FOR LEAD FREE SEE NOTE 15	H	03	03	03	03	03	03	03	03	03	03	19	02
	G	03	03	03	03	03	03	03	03	03	03	19	19
	F	-	03	-	03	-	03	-	03	-	03	-	03
	E	41	41	41	41	41	41	41	41	03	03	19	19
	D	37	37	37	37	37	37	37	37	19	19	03	03
	C	50	50	50	50	50	50	50	50	03	03	19	19
	B	37	37	37	37	37	37	37	37	03	03	19	19
	A	50	50	50	50	50	50	50	50	03	03	19	19
	GND	06	06	06	06	06	06	06	06	02	02	02	02

FOR REAR
PLUG UP
APPLICATIONS.
PCB THICK-
NESS RANGE: 4.30-5.70
WHEN MATED TO
METRAL 1000
RECEPT.
CANNOT BE MATED
TO METRAL 4000
RECEPT.
(2.30 MIN
IN NON-
STANDARD
REAR PLUG-UP
APPLICATIONS)

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)
NO PIN ALIGNER

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)
NO PIN ALIGNER

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)
NO PIN ALIGNER

FOR REAR PLUG UP
APPLICATIONS, PCB
THICKNESS RANGE: 2.95
-5.30 WHEN MATED TO
METRAL 1000 RECEPT.
AND 3.30-5.30 WHEN MATED
TO METRAL 4000 RECEPT.
(2.30 MIN IN NON-STANDARD
REAR PLUG UP APPLICATIONS)
NO PIN ALIGNER

mat'l code SEE NOTE 5				tolerances unless otherwise specified				CUSTOMER			
ltr	ecn no.	dr	date	linear	COPY				title		
AL					0.X ±0.3				VERTICAL SIGNAL HDR 8 ROW		
					0.XX ±0.13				P.F. 96 POS. SELECT LOAD EXT.		
					.XXX ±0.051				product family METRAL 1000		
				angles	0° ±2°				size		
				dr	E. KROPER. 2001-01-10				dwg no		
				enrg	J. VOLSTORF 2001-01-10				213		
				chr	J. VOLSTORF 2001-01-10				sheet		
				appd	J. VOLSTORF 2001-01-10				9		
sheet	revision										
index	sheet										

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X033 *RPU FOR LEAD FREE SEE NOTE 15	H	03	03	03	03	03	03	03	03	03	03	03	03
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	-	03	-	03	-	03	-	03	-	03	-	03
	E	03	03	41	41	41	41	41	41	03	03	03	03
	D	03	03	37	37	37	37	37	37	03	03	03	03
	C	03	03	50	50	50	50	50	50	03	03	03	03
	B	03	03	37	37	37	37	37	37	03	03	03	03
	A	03	03	50	50	50	50	50	50	03	03	03	03
	GND	02	02	06	06	06	06	06	06	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X034 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	04	04	02	02	02	02	02	02	02	02	02	02
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X035 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	04	04	02	02	02	02	01	02	02	02	02	02
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63784-X036 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	03	01	01	03	01	01
	G	02	02	02	02	02	02	03	01	01	03	01	01
	F	02	02	02	02	02	02	03	01	01	03	01	01
	E	03	02	02	02	02	02	03	01	01	03	01	01
	D	03	02	02	02	02	02	03	01	01	03	01	01
	C	03	02	02	02	02	02	03	01	01	03	01	01
	B	03	02	03	02	02	02	03	01	01	03	01	01
	A	03	02	02	02	02	02	02	01	01	03	01	01
	GND	02	02	02	02	02	02	02	02	02	02	02	02

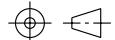


1 2											
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X037 FOR LEAD FREE SEE NOTE 15	H	03	02	02	03	02	03	02	02	02	03
	G	03	02	02	03	02	03	02	03	02	03
	F	03	02	02	03	03	03	02	02	03	03
	E	03	02	02	03	02	03	02	03	02	03
	D	03	02	02	03	02	03	02	03	02	03
	C	03	02	02	03	03	03	03	02	03	03
	B	03	02	02	03	02	03	02	02	02	03
	A	03	02	02	03	02	03	02	02	02	03
	GND	02	02	02	02	02	02	02	02	02	02
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X038 FOR LEAD FREE SEE NOTE 15	H	02	02	02	19	-	19	-	02	-	19
	G	02	02	02	19	-	19	-	02	-	19
	F	02	-	02	19	-	19	-	-	-	19
	E	02	02	02	19	-	19	-	02	-	19
	D	02	02	02	19	-	19	-	02	-	19
	C	02	02	02	19	-	19	-	02	-	19
	B	02	02	02	19	-	19	-	02	-	19
	A	02	02	02	19	-	19	-	02	-	19
	GND	-	-	-	-	-	-	-	-	-	-
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X039 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	02	03	03
	G	02	02	02	02	02	02	02	02	03	03
	F	02	02	02	03	02	02	02	02	03	03
	E	02	02	02	01	02	02	02	02	03	03
	D	03	01	02	01	02	02	02	02	03	03
	C	02	02	02	01	02	02	02	02	03	03
	B	02	02	02	01	02	02	02	02	03	03
	A	03	01	02	01	02	02	02	02	03	03
	GND	01	01	01	01	01	01	01	01	01	01
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X040 FOR LEAD FREE SEE NOTE 15	H	03	03	03	03	03	03	02	02	02	02
	G	03	03	03	03	03	03	02	02	02	02
	F	03	03	03	03	03	03	02	02	02	02
	E	03	03	03	03	03	03	02	02	02	02
	D	03	03	03	03	03	03	02	02	02	02
	C	03	03	03	03	03	03	02	02	02	02
	B	03	03	03	03	03	03	02	02	02	02
	A	03	03	03	03	03	03	02	02	02	02
	GND	01	01	01	01	01	01	01	01	01	01
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X041 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	02	02	02	02	02	01
	G	02	02	02	02	02	02	02	02	02	01
	F	02	02	02	02	02	02	02	02	02	01
	E	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	03
	C	02	02	02	02	02	02	02	02	02	03
	B	02	02	02	02	02	02	02	02	02	03
	A	02	02	02	02	02	02	02	02	02	01
	GND	01	01	01	01	01	01	01	01	01	01

1 | 2

3											
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X042 FOR LEAD FREE SEE NOTE 15	H	01	02	02	02	02	02	01	02	02	02
	G	02	02	02	02	02	02	02	02	02	03
	F	02	02	02	02	02	02	02	02	02	03
	E	02	02	02	02	02	02	02	02	02	03
	D	02	02	02	02	02	02	02	02	02	03
	C	02	02	02	02	02	02	02	02	02	03
	B	02	02	02	02	02	02	02	02	02	03
	A	02	02	02	02	02	02	02	02	02	03
	GND	01	01	01	01	01	01	01	01	01	01
METRAL P/N	ROW	CONTACT CODE									
		1	2	3	4	5	6	7	8	9	10
63784-X043 FOR LEAD FREE SEE NOTE 15	H	02	02	02	02	01	02	01	02	02	02
	G	02	02	02	02	01	02	02	02	02	02
	F	02	02	02	02	01	02	02	02	02	02
	E	02	02	02	02	01	02	02	02	02	02
	D	02	02	02	02	03	02	02	02	02	02
	C	02	02	02	02	03	02	02	02	02	02
	B	02	02	02	02	03	02	02	02	02	02
	A	02	02	02	02	03	02	02	02	02	02
	GND	01	01	01	01	01	01	01	01	01	01

A

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			
AL					0. XX ± 0.13			VERTICAL SIGNAL HDR 8 ROW			
					. XXX ± .051			P.F. 96 POS. SELECT LOAD EXT.			
				angles	0° ± 2°	MM ←→ scale 1:1		product family			
				dr	E. KROPER. 2001-01-10			METRAL 1000			
				enrg	J. VOLSTORF 2001-01-10			code			
				chr	J. VOLSTORF 2001-01-10	A	size	dwg no			
				appd	J. VOLSTORF 2001-01-10			63784			
								sheet			
sheet index	revision sheet										

B

Pro/E

3 |

cage code 22526

4