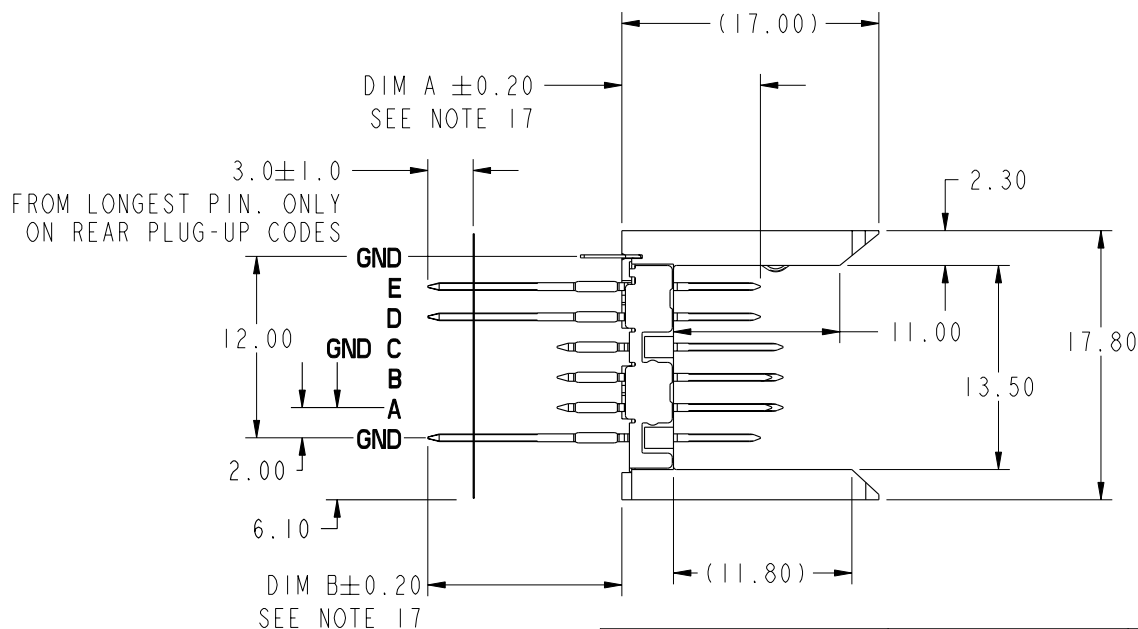
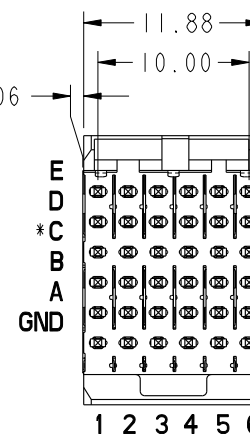
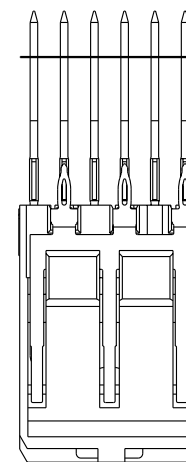
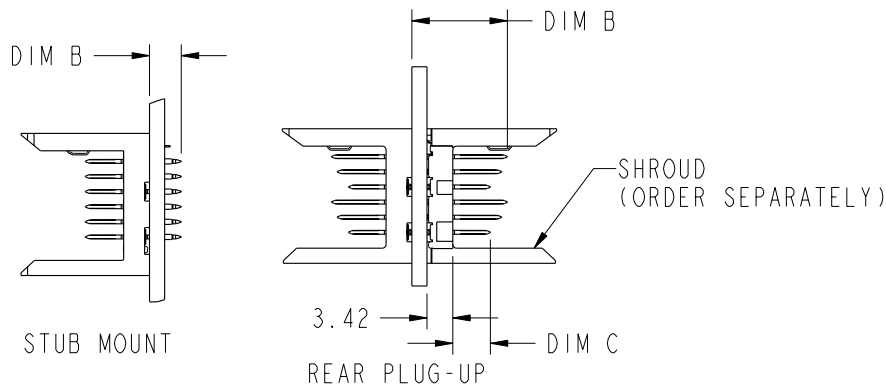


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PRODUCT NUMBER
10043968-XXXX
10043968-XXXXLF



***ROW C INFORMATION**
ODD NUMBER COLUMNS WITHIN ROW C ARE COMMONED
TO GROUND INTERNALLY WITHIN THE HOUSING
WHEN A U-SHAPED STRIPLINE SHIELD IS PRESENT.

mat'l code				tolerances unless otherwise specified				CUSTOMER				FCI			
ltr	ecn no.	dr	date					COPY				title			
A	V04-0815	TAB	08/12/04	linear				projection				product family	METRAL 1000/4000	code	
B	V04-0879	TAB	11/02/04									size	dwg no	213	
C	V05-0535	DAI	06/02/05	angles								scale	1:1	sheet	1 of 8
D	V06-0573	DCH	2006-06-15	dr	T. BRUNGARD	08/12/04									
E	V06-0868	DCH	2006-08-29	enrg	J. VOLSTORF	08/12/04									
				chr	J. VOLSTORF	08/12/04									
				appd	J. VOLSTORF	08/12/04									
sheet	revision	E	E	E	E	E	E	E	E	E	E	cage code	22526		
index	sheet	1	2	3	4	5	6	7	8						

Pro/E

3

PDM: Rev:E

STATUS: Released

Printed: Sep 02, 2006

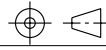


INFORMATION FOR MATING WITH 73981 & 84688 METRAL 1000 RECEPTACLES											
METRAL 1000/2000 PIN CODES											
		DIM B									
		4.30	11.55	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
DIM A	5.00	1*	54	22	30	5	35	48	40	65	9
	5.75	2*	55	44	31	6	36	49	25	66	10
	6.50	3*	56	45	32	7	37	50	41	24	11
	7.25	4*	57	46	33	8	38	51	42	67	12
	8.00	19*	58	47	34	20	39	52	43	68	21
RESTRICTION ON CURCUIT BOARD THICKNESS RANGE FOR PIN POSITIONS A, B, C, D & E											
		DIM B									
		4.30	11.55	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS	MIN THICKNESS	1.60	1.60	2.95	2.95	2.95	3.05	3.80	4.30	5.00	5.70
	MAX THICKNESS	NONE	***	3.80	4.55	5.30	6.05	6.80	7.30	8.00	8.70
RESTRICTION ON CURCUIT BOARD THICKNESS RANGE FOR PIN POSITION 'GND' **											
		DIM B									
		4.30	11.55	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS	MIN THICKNESS	1.60	1.60	2.95	3.25	4.00	4.75	5.50	6.00	6.70	7.40
	MAX THICKNESS	NONE	***	4.20	4.95	5.70	6.45	7.20	7.70	8.40	9.10

- * STUB PINS - NO REAR PLUG-UP
- ** THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF
PIN 'GND' IS ONE SIZE SHORTER THAN THE OTHER PINS.
- *** NOT A POSSIBLE METRAL 1000 REAR PLUG-UP CODE,
SPECIAL APPLICATION

METRAL 4000 PIN CODES NO REAR PLUG-UP		
DIM A	PIN CODES	DIM B
5.00	01	2.70
5.75	02	
6.50	03	
7.25	04	
8.00	*19	

* CURRENTLY NOT AVAILABLE

mat'l code				tolerances unless otherwise specified				CUSTOMER		 www.fciconnect.com	
ltr	ecn no.	dr	date	linear					COPY		
E	-	-	-						projection	title	
				angles						HEADER SELECT LOAD STR P.F. STD 5x6	
					dr	T. BRUNGARD	08/12/04	 MM scale 1:1	product family		METRAL 1000/4000
				enrg	J. VOLSTORF	08/12/04			size	dwg no	code
				chr	J. VOLSTORF	08/12/04			A	10043968	213 sheet 2
				appd	J. VOLSTORF	08/12/04					
sheet index	revision sheet										

CIRCUIT BOARD THICKNESS RANGE FOR REAR PLUG-UP CODES		
PRODUCT NUMBER	MIN	MAX
10043968-X001	*** 1.6mm	***
10043968-X002	*** 1.6mm	***
10043968-X003	*** 1.6mm	***

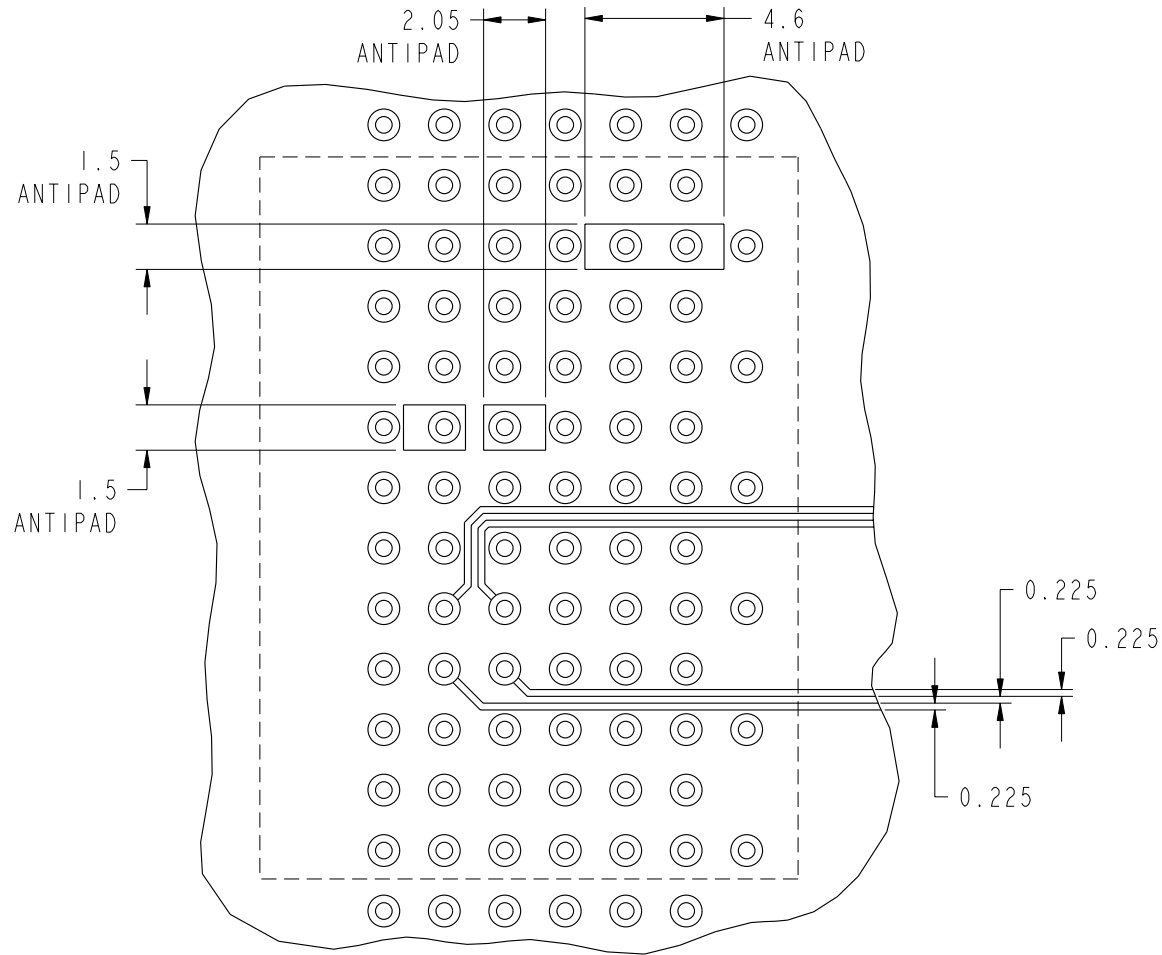


PRODUCT NUMBER	PIN CONTACT AREAS TO RECEPTACLE	PRESS FIT PIN TO PCB	GROUND SPRING CONTACT FINGERS SEE NOTE 20	GROUND SPRING EON PRESS FIT TO PCB	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
10043968-1YYY	0.8μm Au OVER Ni	SnPb OVER Ni	0.8μm Au OVER Ni	SnPb OVER Ni	84621-101
10043968-2YYY	2.0μm Au OVER Ni	SnPb OVER Ni	1.3μm Au OVER Ni	SnPb OVER Ni	84621-301
10043968-3YYY	1.3μm Au OVER Ni	SnPb OVER Ni	1.3μm Au OVER Ni	SnPb OVER Ni	84621-301
10043968-5YYY	1.3μm GXT OVER Ni	SnPb OVER Ni	1.3μm GXT OVER Ni	SnPb OVER Ni	84621-501
10043968-9YYY	0.8μm GXT OVER Ni	SnPb OVER Ni	0.8μm Au OVER Ni	SnPb OVER Ni	84621-101
10043968-AYYY	0.8μm Au OVER Ni	0.08μm Au OVER Ni	0.8μm Au OVER Ni	SnPb OVER Ni	84621-101
10043968-1YYYYLF	0.8μm Au OVER Ni	Sn OVER Ni	0.8μm Au OVER Ni	Sn OVER Ni	84621-101LF
10043968-2YYYYLF	2.0μm Au OVER Ni	Sn OVER Ni	1.3μm Au OVER Ni	Sn OVER Ni	84621-301LF
10043968-3YYYYLF	1.3μm Au OVER Ni	Sn OVER Ni	1.3μm Au OVER Ni	Sn OVER Ni	84621-301LF
10043968-5YYYYLF	1.3μm GXT OVER Ni	Sn OVER Ni	1.3μm GXT OVER Ni	Sn OVER Ni	84621-501LF
10043968-9YYYYLF	0.8μm GXT OVER Ni	Sn OVER Ni	0.8μm Au OVER Ni	Sn OVER Ni	84621-101LF
10043968-AYYYLF	0.8μm Au OVER Ni	0.08μm Au OVER Ni	0.8μm Au OVER Ni	Sn OVER Ni	84621-101LF

PRESS-FIT HOLES	TYPE 1	TYPE 2
HOLE DIAMETER AFTER PLATING	0.65-0.80	0.45-0.55
DRILLED HOLE	0.81-0.86 (0.85 DRILL)	0.58-0.62 (0.60 DRILL)
COPPER PLATING	0.025 MIN	0.025 MIN-0.050 MAX
SnPb PLATING	0.005-0.015	0.005-0.015

mat'l code				tolerances unless otherwise specified		CUSTOMER		FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	COPY				
E	-	-	-		projection				
				angles					
				dr	T. BRUNGARD	08/12/04			
				enr	J. VOLSTORF	08/12/04			
				chr	J. VOLSTORF	08/12/04	product family		METRAL 1000/4000
				appd	J. VOLSTORF	08/12/04	size		dwg no
sheet		revision				scale		A	
index		sheet						10043968	
								code	
								213	
								sheet	
								4	

PRODUCT NUMBER
10043968-XXXX
10043968-XXXXLF



RECOMMENDED TRACK AND ANTIPAD DIMENSIONS FOR 4000 PINS
SCALE 4:1

mat'l code				tolerances unless otherwise specified		CUSTOMER		FCI			
ltr	ecn no.	dr	date	linear		COPY		www.fciconnect.com			
E	-	-	-			projection		title			
								HEADER SELECT LOAD			
				angles				STR P.F. STD 5x6			
				dr	T. BRUNGARD	08/12/04		product family			code
				enr	J. VOLSTORF	08/12/04		METRAL 1000/4000			213
				chr	J. VOLSTORF	08/12/04		size	dwg no		
				appd	J. VOLSTORF	08/12/04		A	10043968	sheet	6
sheet index	revision sheet										

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1

2

3

4

METRAL P/N	ROW	CONTACT CODE					
		**1	2	**3	4	5	6
10043968-X001 *** SEE NOTE 19 LEAD FREE OPTION	E	*2	*2	*2	*2	55	55
	D	*2	*2	*2	*2	55	55
	C	*2	*2	*2	*2	55	55
	B	*2	*2	*2	*2	55	55
	A	*2	*2	*2	*2	55	55
	GND	*2	*2	*2	*2	55	55

METRAL P/N	ROW	CONTACT CODE					
		**1	2	**3	4	**5	6
10043968-X003 *** SEE NOTE 19 LEAD FREE OPTION	E	55	*2	*2	*2	*2	55
	D	55	*2	*2	*2	*2	55
	C	55	*2	*2	*2	*2	55
	B	55	*2	*2	*2	*2	55
	A	55	*2	*2	*2	*2	55
	GND	55	*2	*2	*2	*2	55

METRAL P/N	ROW	CONTACT CODE					
		1	2	**3	4	**5	6
10043968-X002 *** SEE NOTE 19 LEAD FREE OPTION	E	55	55	*2	*2	*2	*2
	D	55	55	*2	*2	*2	*2
	C	55	55	*2	*2	*2	*2
	B	55	55	*2	*2	*2	*2
	A	55	55	*2	*2	*2	*2
	GND	55	55	*2	*2	*2	*2

* DENOTES METRAL 4000 PIN
ALL OTHER ARE METRAL 1000/2000 PINS.

* * U-SHAPED STRIPLINES INSERTED
IN THESE COLUMNS.

*** REAR PLUG-UP CODES WITHOUT PIN ALIGNER.

mat'l code				--				tolerances unless otherwise specified				CUSTOMER				FCj www.fciconnect.com			
ltr	ecn no.	dr	date	linear					COPY				projection						
E	-	-	-																
				angles									MM scale 1:1						
				dr	T. BRUNGARD	08/12/04													
				enr	J. VOLSTORF	08/12/04													
				chr	J. VOLSTORF	08/12/04													
				appd	J. VOLSTORF	08/12/04													
sheet index		revision sheet																	

title	HEADER SELECT LOAD STR P.F. STD 5x6									
product family	METRAL 1000/4000									
size	A									
dwg no	10043968									
code	213									
sheet	7									

PRODUCT NUMBER
10043968-XXXX
10043968-XXXXLF

NOTES:

- SEE APPLICATION SPECIFICATIONS GS-20-010 AND GS-20-014 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS. SEE PRODUCT SPECIFICATION: GS-12-110
*GS-12-184
- SEE FCI PUBLICATION 95011-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
- SEE FCI PUBLICATION 95011-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 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: SEE TABLE
- 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 COMPLAINT SECTIONS OF THE GROUND SPRING OF THE HEADER DIRECTLY OPOSE 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 10043968-X YYY

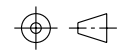
PIN POSITIONS
PLATING CODE

- WE CURRENTLY HAVE NO INSPECTION METHOD TO CHECK TP OF CONTACT PIN TIP ON BOTTOM SIDE OF HEADER.

- AFTER INSERTION INTO CIRCUIT BOARD WITH QUALIFIED TOOL.
- THE PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET THE EUROPEAN DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.

ALL PRODUCTS EXCEPT THOSE WITH PART NUMBERS CONTAINING (DRAWING NO.) -N1--- OR (DRAWING NO.) -N5--- 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 AN "LF" SUFFIX. EXAMPLE: 10043968-X00ILF
- EQUIVALENT PRECIOUS METAL PLATINGS MAY BE SUBSTITUTED.

mat'l code				tolerances unless otherwise specified				CUSTOMER		 www.fciconnect.com					
ltr	ecn no.	dr	date	linear	COPY				projection						
E	-	-	-												
				angles						title HEADER SELECT LOAD STR P.F. STD 5x6					
				dr	T. BRUNGARD	08/12/04	product family METRAL 1000/4000	code 213							
				enrg	J. VOLSTORF	08/12/04								size A	sheet 8
				chr	J. VOLSTORF	08/12/04									
				appd	J. VOLSTORF	08/12/04	scale		1:1						
sheet index		revision sheet													



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