

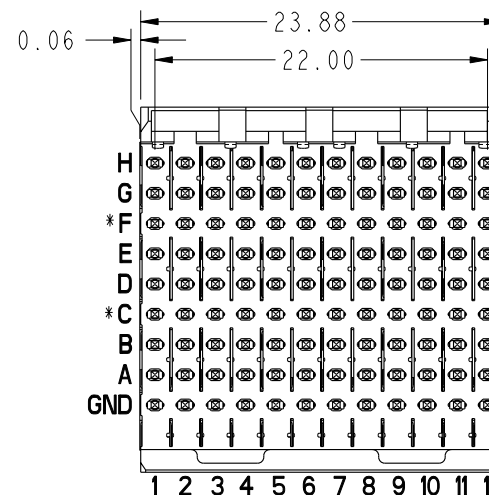
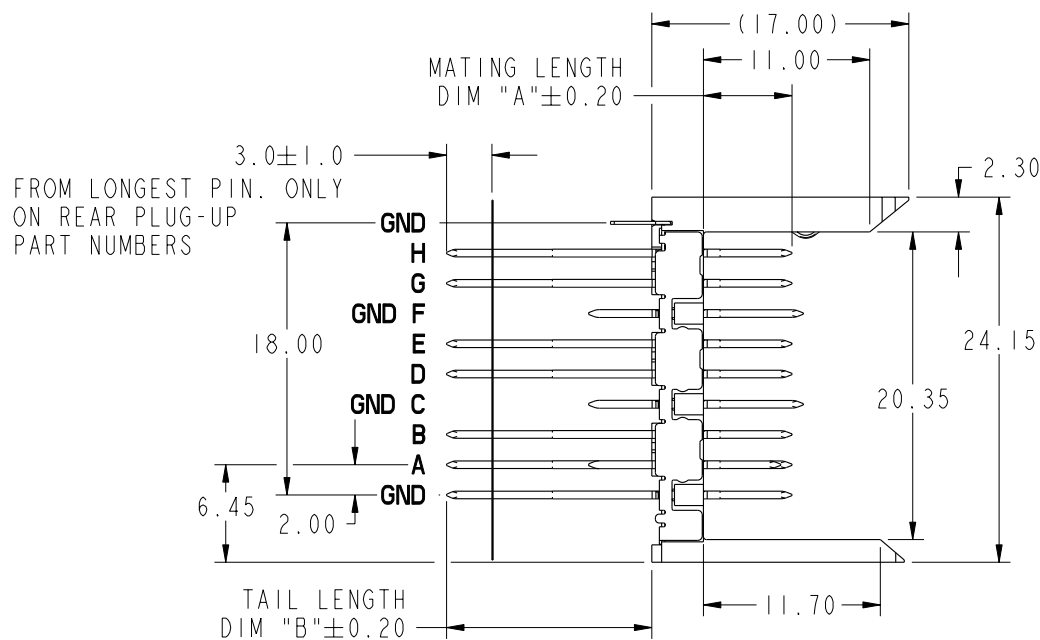
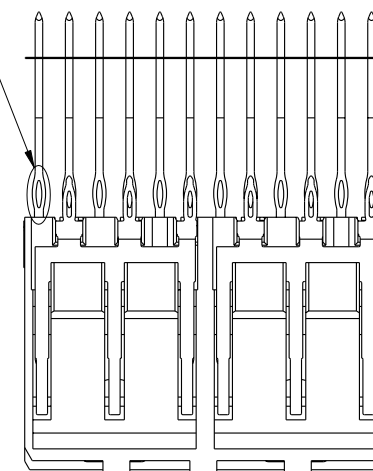


PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	APPLICATION
63741-1YY	TELCORDIA CO	STANDARD
63741-1YYLF		LEAD FREE
63741-5YY	TELCORDIA UE	STANDARD
63741-5YYLF		LEAD FREE

EYE OF NEEDLE
PRESS FIT SECTION

BABY-H
PRESS FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 17



***ROW C AND F INFORMATION**
ODD NUMBER COLUMNS WITHIN ROW C & F ARE COMMONED
TO GROUND INTERNALLY WITHIN THE HOUSING. THE
EVEN NUMBER COLUMNS WITHIN ROW C & F ARE NOT.
FOR MAXIMUM PERFORMANCE IT IS RECOMMENDED THESE
EVEN COLUMNS BE GROUND COMMONED WITHIN PCB.
SEE NOTE 14

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 8 ROW P.F. 96 POS. SELECT LOAD EXT.	
P	V06-0498	DCH	2006-05-30		0.XX ± 0.13						
R	V07-0181	DCH	2007-04-20		.XXX $\pm .051$						
S	V08-0010	HTB	2008-01-07	angles	0° $\pm 2^\circ$				scale 1:1	product family METRAL 2000	code 213 sheet 1 of 6
T	V08-0023	LP	2008-1-23	dr	E. KROPER.	2001-01-15					
-	-	-	-	enrg	J. VOLSTORF	2001-01-15					
M	V03-1156	TAB	2003-10-31	chr	J. VOLSTORF	2001-01-15					
N	V05-0814	VS	2005-09-21	appd	J. VOLSTORF	2001-01-15					
sheet index	revision sheet	T	T	T	T	T	T				
		1	2	3	4	5	6				

Pro/E

3

cage code
22526

4

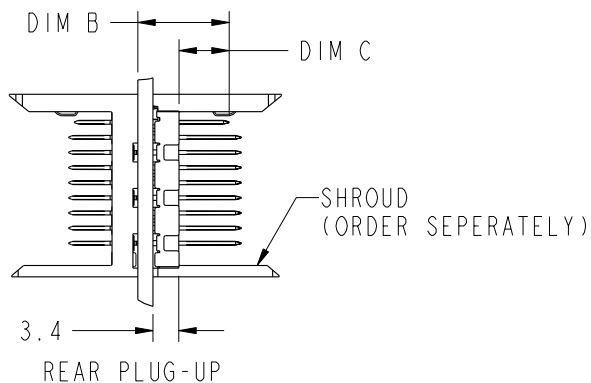
PDM: Rev:T

STATUS: Released

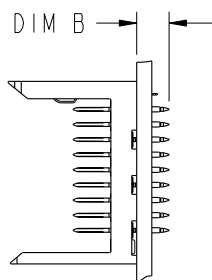
Printed: May 13, 2011

PRODUCT NUMBER
SEE SHEET 1

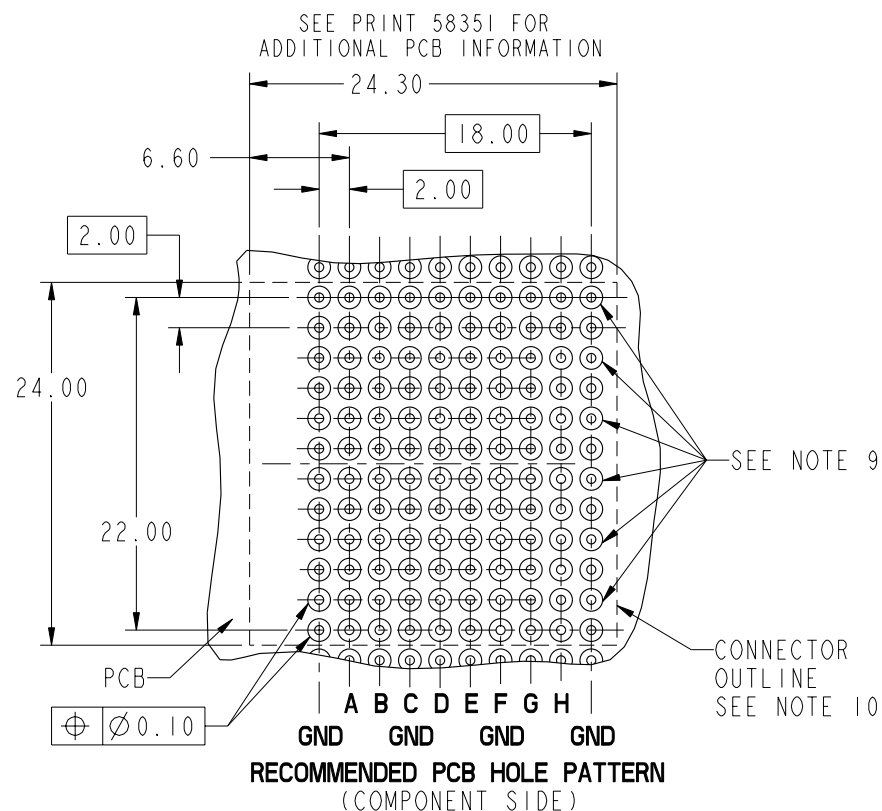
PRESS-FIT HOLES	OPTION 1
HOLE DIAMETER AFTER PLATING	Ø 0.65-0.80
DRILLED HOLE	Ø 0.81-0.86 (Ø 0.85 DRILL)
COPPER PLATING	0.025 MIN
SnPb PLATING	0.005-0.015



REAR PLUG-UP



STUB MOUNT



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	COPY	title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.	product family METRAL 2000
T					0.XX ± 0.13				
					.XXX ± 0.051				
				angles	0° ± 2°	MM scale 1:1	A	size 63741	code 213 sheet 2
				dr	E. KROPER. 2001-01-15				
				enr	J. VOLSTORF 2001-01-15				
				chr	J. VOLSTORF 2001-01-15	J. VOLSTORF 2001-01-15	A	63741	213 2
				appd	J. VOLSTORF 2001-01-15				
sheet index	revision sheet								

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to others without the written consent of FCI.
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PIN CODE NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 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

* 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	COPY	title	VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.
T					0.XX ±0.13				
					.XXX ±.051				
				angles	0° ±2°	MM ←→	scale	product family	METRAL 2000
				dr	E. KROPER. 2001-01-15				
				enrg	J. VOLSTORF 2001-01-15				
					chr	J. VOLSTORF 2001-01-15	A	size	dwg no
					appd	J. VOLSTORF 2001-01-15			
sheet	revision							code	213
index	sheet								
								cage code	22526



PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 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	ecr no.	dr	date	linear	0.X ±0.3	projection	COPY	title	VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.
T					0.XX ±0.13				
					.XXX ±.051				
				angles	0° ±2°		MM	product family	METRAL 2000
			dr	E. KROPER.	2001-01-15				
			enrg	J. VOLSTORF	2001-01-15				
			chr	J. VOLSTORF	2001-01-15	scale	1:1	size	A
			appd	J. VOLSTORF	2001-01-15				
sheet	revision							dwg no	63741
index	sheet							code	213
								sheet	4



SELECT LOAD PATTERNS												
METRAL P/N	ROW	CONTACT CODE										
		1	2	3	4	5	6	7	8	9	10	11
63741-X01 STUB MOUNT SEE NOTE 16 LEAD FREE OPTION	H	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02
	F	03	03	03	03	03	03	03	03	03	03	03
	E	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02
	C	03	03	03	03	03	03	03	03	03	03	03
	B	02	02	02	02	02	02	02	02	02	02	02
	A	01	02	02	02	02	02	02	02	02	02	02
	GND	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
63741-X02 *RPU SEE NOTE 16 LEAD FREE OPTION	H	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49
	A	48	49	49	49	49	49	49	49	49	49	49
	GND	49	49	49	49	49	49	49	49	49	49	49

METRAL P/N	ROW	CONTACT CODE										
		1	2	3	4	5	6	7	8	9	10	11
63741-X03 SEE NOTE 16 LEAD FREE OPTION	H	02	02	02	02	02	02	02	02	02	02	01
	G	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02
	A	03	03	03	03	03	03	03	03	03	03	03
	GND	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
63741-X04 SEE NOTE 16 LEAD FREE OPTION	H	02	02	02	02	02	02	02	02	02	02	02
	G	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02
	A	01	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02

*REAR PLUG-UP PART NUMBER

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
5.50 - 6.80

METRAL P/N	ROW	CONTACT CODE										
		1	2	3	4	5	6	7	8	9	10	11
63741-X05 *RPU SEE NOTE 16 LEAD FREE OPTION	H	25	25	25	25	25	25	25	25	25	25	25
	G	24	24	24	24	24	24	24	24	24	24	24
	F	12	12	12	12	12	12	12	12	12	12	12
	E	25	25	25	25	25	25	25	25	25	25	25
	D	24	24	24	24	24	24	24	24	24	24	24
	C	12	12	12	12	12	12	12	12	12	12	12
	B	49	25	25	25	25	25	25	25	25	25	25
	A	48	24	24	24	24	24	24	24	24	24	24
	GND	49	49	49	49	49	49	49	49	49	49	49

METRAL P/N	ROW	CONTACT CODE										
		1	2	3	4	5	6	7	8	9	10	11
63741-X06 *RPU SEE NOTE 16 LEAD FREE OPTION	H	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49
	A	35	49	49	49	49	49	49	49	49	49	49
	GND	36	36	36	36	36	36	36	36	36	36	36

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
5.70 - 7.20
FOR METRAL 1000
APPLICATIONS
(RECEPTACLE)
ADD 6.00 - 7.20
FOR METRAL 4000
APPLICATIONS.

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.75 - 6.45 FOR
METRAL 1000
APPLICATIONS
(RECEPTACLE)
ADD 4.80 - 6.45
FOR METRAL 4000
APPLICATIONS.

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	
T					0.XX ±0.13	projection		VERTICAL SIGNAL HDR 8 ROW	
				angles	.XXX ±.051			P.F. 96 POS. SELECT LOAD EXT.	
				dr	0° ±2°	MM		product family METRAL 2000	
				enrg	E. KROPER. 2001-01-15			code 213	
				chr	J. VOLSTORF 2001-01-15	size		sheet 5	
				appd	J. VOLSTORF 2001-01-15	A		63741	
sheet index	revision sheet								

Pro/E

cage code 22526

PDM: Rev:T

STATUS: Released

Printed: May 13, 2011

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 950511-028 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
STRIPLINE SHIELD 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.
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 ROWS 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 ROWS 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 COMPLAINT 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 63741-XYLF



14. FOR FRONT PLUG-UP APPLICATIONS, THE EVEN NUMBERED PINS IN ROW 'C' & 'F' CAN BE USED FOR POWER AS WELL AS FOR GROUND. IF THE SURROUNDING PINS ARE NOT USED FOR POWER, THEN EACH PIN CAN CARRY 3 AMPS. IF THE SURROUNDING PINS ARE USED FOR POWER, THEN EACH PIN CAN CARRY 1 AMP. WHEN THE SURROUNDING PINS ARE USED ONLY FOR LOW SPEED SIGNALS, THEN THE EVEN NUMBERED 'C' AND 'F' ROW PINS CAN ALSO BE USED FOR LOW SPEED SIGNALS. THIS IS NOT TRUE FOR REAR PLUG-UP APPLICATIONS USING METRAL 2000 SHROUD AS IN THIS CASE ALL 'C' AND 'F' ROW PINS ARE COMMON TO GROUND.

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: 63741-XYLF

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		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.				
T					0.XX ±0.13		projection						
				angles	.XXX ±.051								
					0° ±2°								
				dr	E. KROPER.	2001-01-15			product family		METRAL 2000	code	213
				enrg	J. VOLSTORF	2001-01-15			size		dwg no		
				chr	J. VOLSTORF	2001-01-15	scale		A	63741		6	
				appd	J. VOLSTORF	2001-01-15	1:1						
sheet index		revision sheet											