

PRODUCT NUMBER	PLATING PERFORMANCE LEVEL	APPLICATION	SHROUD FOR REAR PLUG UP APPLICATIONS
63743-1YYY	TELCORDIA CO	STANDARD	84818-102
63743-1YYYYLF		LEAD FREE	84818-102LF
63743-5YYY	TELCORDIA UE	STANDARD	84818-502
63743-5YYYYLF		LEAD FREE	84818-502LF
63743-9YYY	TELCORDIA CO	STANDARD	84818-102
63743-9YYYYLF		LEAD FREE	84818-102LF

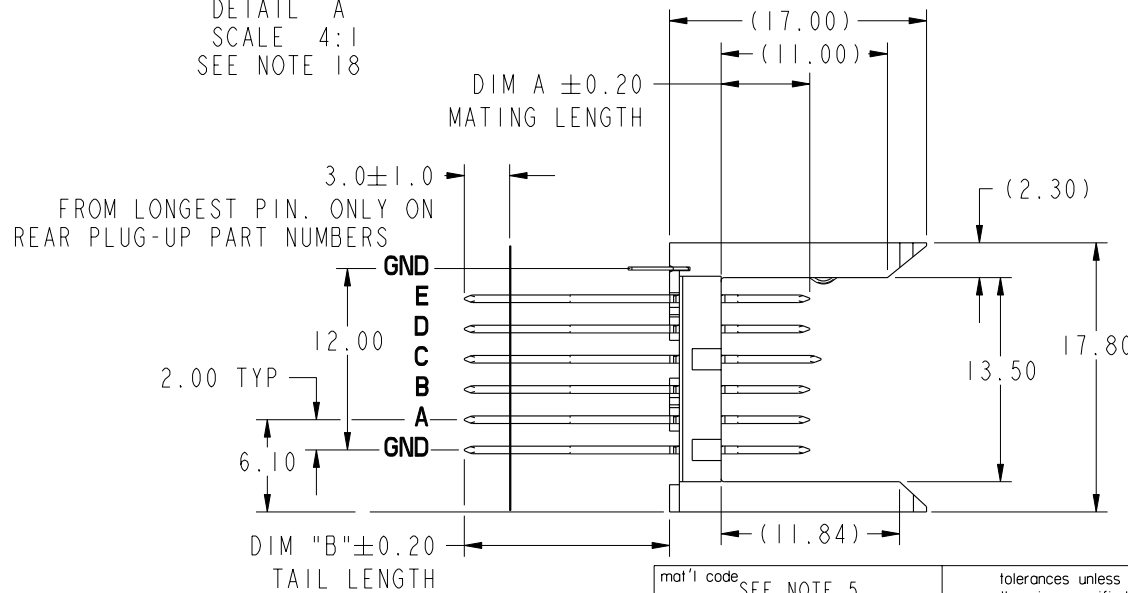


EYE OF NEEDLE  
PRESS FIT SECTION

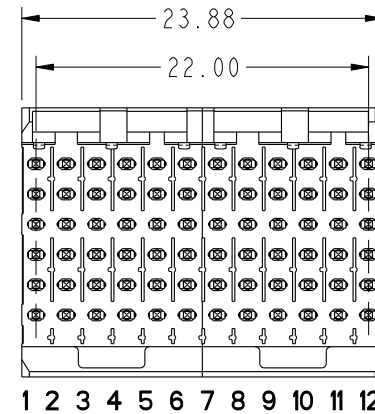
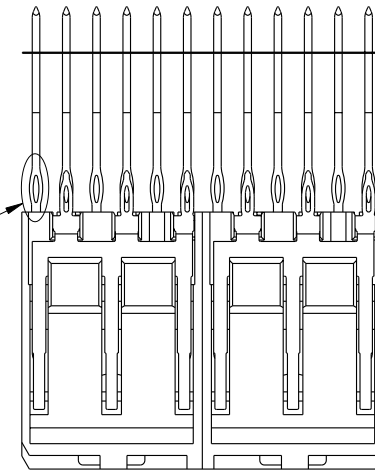


BABY-H  
PRESS FIT SECTION

DETAIL A  
SCALE 4:1  
SEE NOTE 18



SEE DETAIL A



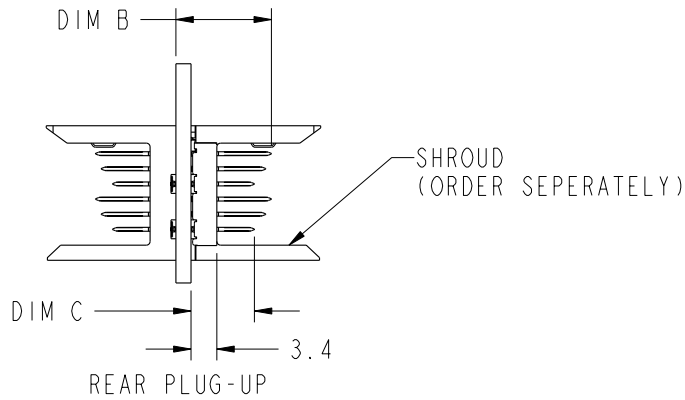
mat'l code SEE NOTE 5				tolerances unless otherwise specified			CUSTOMER		FCJ www.fciconnect.com	
ltr	ecm no.	dr	date	linear	0.X ± 0.3		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. 60 POS. SELECT LOAD STD.	
P	V06-0498	DCH	2006-06-05		0.XX ± 0.13		projection			
R	V06-0779	DAI	2006-08-11	angles	.XXX ± 0.051		MM ← →		product family METRAL 1000 code size dwg no A 63743 sheet 1 of 6	
S	V07-0182	DCH	2007-04-20		0° ± 2°					
T	V07-0733	HTB	2008-01-02	dr	K. BELL	2000-03-15	scale 1:1			
U	V08-0049	LP	2008-2-4	engr	M. HAHN	2000-03-15				
-	-	-	-	chr	M. HAHN	2000-03-15				
N	V05-0533	TAB	2005-06-01	appd	M. HAHN	2000-03-15				
sheet index	revision sheet	U	U	U	U	U	U	cage code 22526		4
		1	2	3	4	5	6			



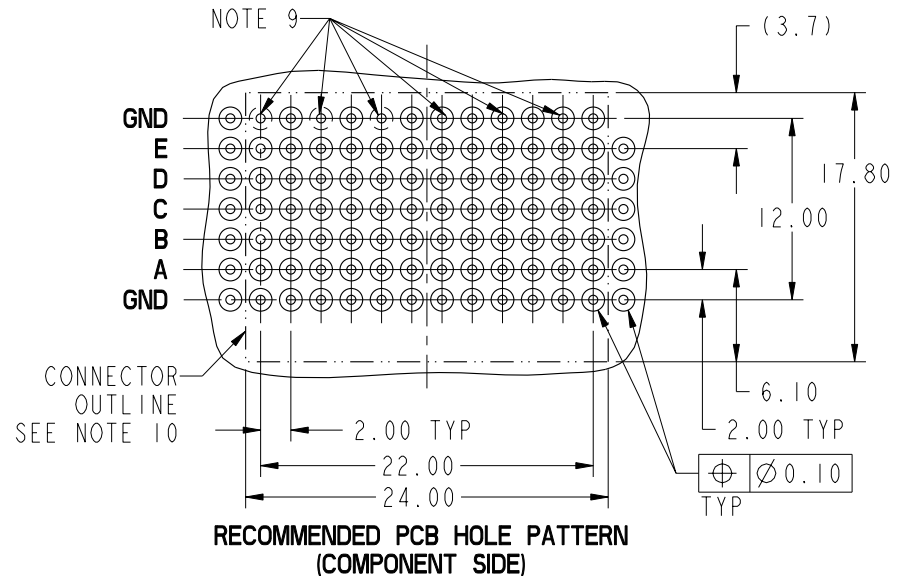
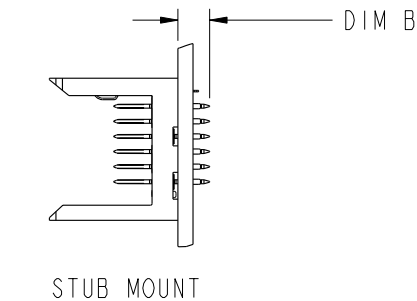
This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCJ. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCJ. Copyright FCJ.

PRODUCT NUMBER  
SEE SHEET 1

PRESS-FIT HOLES	OPTION 1	OPTION 2
HOLE DIAMETER AFTER PLATING	0.65-0.77	0.65-0.80
DRILLED HOLE	0.78-0.83	0.81-0.86 (0.85 DRILL)
COPPER PLATING	0.025-0.050	0.025 MIN
SnPb PLATING	0.005-0.015	0.005-0.015



SEE PRINT 58351 FOR  
ADDITIONAL PCB INFO.



This document is the property of and embodies  
 CONFIDENTIAL and PROPRIETARY information of FCI.  
 No part of the information shown on this  
 document may be used in any way or disclosed  
 to others without the written consent of FCI.  
 Copyright FCI.

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 5 ROW P.F. 60 POS. SELECT LOAD STD.
U				linear	0.XX ± 0.13	projection	
				angles	.XXX ± .051 0° ± 2°		
		dr	K. BELL	2000-03-15		MM	product family METRAL 1000 code
		enr	M. HAHN	2000-03-15		← MM →	size
		chr	M. HAHN	2000-03-15		scale	dwg no
		appd	M. HAHN	2000-03-15		1:1	63743
sheet index	revision sheet						213
							sheet 2

PIN CODE NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 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



This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.

\* 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		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. 60 POS. SELECT LOAD STD.
U					0.XX ± 0.13		projection		
				angles	.XXX ± .051				
					0° ± 2°				
				dr	K. BELL	2000-03-15	product family METRAL 1000		code
				engr	M. HAHN	2000-03-15	size	dwg no	213
				chr	M. HAHN	2000-03-15	A	63743	sheet
				appd	M. HAHN	2000-03-15			3
sheet index	revision sheet								

A

A

B

B

PIN CODE NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 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

A

A



This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.

\* 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		www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3		COPY		title VERTICAL SIGNAL HDR 5 ROW P.F. 60 POS. SELECT LOAD STD.
U					0.XX ±0.13		projection		
					.XXX ±.051				
				angles	0° ±2°				product family METRAL 1000 code 213 size dwg no 63743 sheet 4
				dr	K. BELL	2000-03-15	MM		
				engr	M. HAHN	2000-03-15			
				chr	M. HAHN	2000-03-15	scale 1:1		
				appd	M. HAHN	2000-03-15	A		
sheet index	revision sheet								

B

B



This document is the property of and embodies  
 CONFIDENTIAL and PROPRIETARY information of FCI.  
 No part of the information shown on this  
 document may be used in any way or disclosed  
 to others without the written consent of FCI.  
 Copyright FCI.

SELECT LOAD PATTERNS												
METRAL P/N	ROW	CONTACT CODE										
63743-X001 FOR LEAD FREE SEE NOTE 16	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	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02
63743-X002 FOR LEAD FREE SEE NOTE 16	E	01	01	01	01	01	01	01	01	01	01	01
	D	01	01	01	01	01	01	01	01	01	01	01
	C	03	03	03	03	03	03	03	03	03	03	03
	B	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	01	01	01	01	01	01	01	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01
63743-X003 *RPU FOR LEAD FREE SEE NOTE 16	E	48	48	48	48	48	48	48	48	48	48	48
	D	48	48	48	48	48	48	48	48	48	48	48
	C	50	50	50	50	50	50	50	50	50	50	50
	B	48	48	48	48	48	48	48	48	48	48	48
	A	48	48	48	48	48	48	48	48	48	48	48
	GND	48	48	48	48	48	48	48	48	48	48	48
63743-X004 FOR LEAD FREE SEE NOTE 16	E	19	02	02	02	02	02	02	02	02	02	02
	D	19	02	02	02	02	02	02	02	02	02	02
	C	19	02	02	02	02	02	02	02	02	02	02
	B	19	02	02	02	02	02	02	02	02	02	02
	A	19	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02
63743-X005 FOR LEAD FREE SEE NOTE 16	E	01	01	01	01	01	01	01	01	01	01	01
	D	01	01	01	01	01	01	01	01	01	01	01
	C	01	01	01	01	01	01	01	01	01	01	01
	B	01	01	01	01	01	01	01	01	01	01	01
	A	01	01	03	01	01	03	01	01	03	01	01
	GND	01	01	01	01	01	01	01	01	01	01	01

\*REAR PLUG-UP PART NUMBER

METRAL P/N	ROW	CONTACT CODE											
63743-X006 FOR LEAD FREE SEE NOTE 16	E	01	01	01	01	01	01	01	01	01	01	01	
	D	02	01	01	01	01	01	02	01	01	01	01	
	C	02	01	01	01	01	02	01	01	01	01	01	
	B	03	03	03	03	03	03	03	03	03	03	03	
	A	01	01	01	01	01	01	01	01	01	01	01	
	GND	01	01	01	01	01	01	01	01	01	01	01	
63743-X007 FOR LEAD FREE SEE NOTE 16	E	02	02	02	02	01	02	02	02	02	02	02	
	D	02	02	02	02	02	02	02	02	02	02	02	
	C	02	02	02	02	02	02	02	02	02	02	02	
	B	02	02	02	02	02	02	02	02	02	02	02	
	A	02	02	02	02	02	02	02	02	02	02	02	
	GND	02	02	02	02	02	02	02	02	02	02	02	
63743-X008 FOR LEAD FREE SEE NOTE 16	E	02	02	02	02	01	02	02	02	02	02	02	
	D	02	02	02	02	02	02	02	02	02	02	02	
	C	02	02	02	02	02	02	02	02	02	02	02	
	B	02	02	02	02	03	02	02	02	02	03	02	
	A	02	02	02	02	02	02	02	02	02	02	02	
	GND	02	02	02	02	02	02	02	02	02	02	02	
63743-X009 *RPU FOR LEAD FREE SEE NOTE 16	E	06	05	06	05	06	05	06	05	06	05	06	
	D	06	06	06	06	06	05	06	05	05	05	05	
	C	06	05	05	05	05	05	06	05	05	05	05	
	B	06	05	05	05	05	05	06	05	05	05	05	
	A	06	05	05	05	05	05	06	05	05	05	05	
	GND	31	31	31	31	31	31	31	31	31	31	31	
63743-X010 FOR LEAD FREE SEE NOTE 16	E	55	55	02	02	02	02	55	55	55	55	55	
	D	55	55	02	02	02	02	55	55	55	55	55	
	C	55	55	02	02	02	02	55	55	55	55	55	
	B	55	55	02	02	02	02	55	55	55	55	55	
	A	55	55	02	02	02	02	55	55	55	55	55	
	GND	55	55	02	02	02	02	55	55	55	55	55	

PCB THICKNESS  
 RANGE FOR REAR  
 PLUG UP  
 APPLICATIONS:  
 3.25 - 4.99 FOR  
 METRAL 1000  
 RECEPTACLE  
 APPLICATIONS AND 3.30 - 4.95  
 FOR METRAL  
 4000 APPLICATIONS

NOT A STANDARD METRAL 1000  
 OR METRAL 4000 APPLICATION

mat'l code SEE NOTE 5		tolerances unless otherwise specified		CUSTOMER	www.fciconnect.com
ltr	ecr no.	dr	date	COPY	
U				projection	title VERTICAL SIGNAL HDR 5 ROW P.F. 60 POS. SELECT LOAD STD.
				$0.X \pm 0.3$ $0.XX \pm 0.13$ $.XXX \pm 0.051$ $0^\circ \pm 2^\circ$	
				angles	
				dr	
				enrg	product family METRAL 1000 code size 213
				chr	scale 1:1 A 63743 sheet 5
				appd	
sheet	revision				
index	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 Y14.5, 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 IN CONTACT AREAS MEET PERFORMANCE LEVELS SHOWN IN TABLE ON SHEET 1.  
PLATING ON "LF" TAILS IS Sn ONLY, ALL OTHERS ARE 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 63743-XXXXLF



14. A PLATING HAS Au FLASH IN PRESS-FIT AREA (LEAD FREE).

15. THE PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET THE 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 AN "LF" SUFFIX.  
EXAMPLE: 63743-X01LF

17. EQUIVALENT PRECIOUS METAL PLATINGS MAY BE SUBSTITUTED.

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



This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.

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 5 ROW P.F. 60 POS. SELECT LOAD STD.
U					0.XX ±0.13		projection		
				angles	.XXX ±.051		MM		product family METRAL 1000
					0° ±2°		MM		
				dr	K. BELL	2000-03-15	← MM →		size 63743
				enrg	M. HAHN	2000-03-15	scale 1:1		
				chr	M. HAHN	2000-03-15			A
				appd	M. HAHN	2000-03-15			
sheet index	revision sheet								