

**FCI**

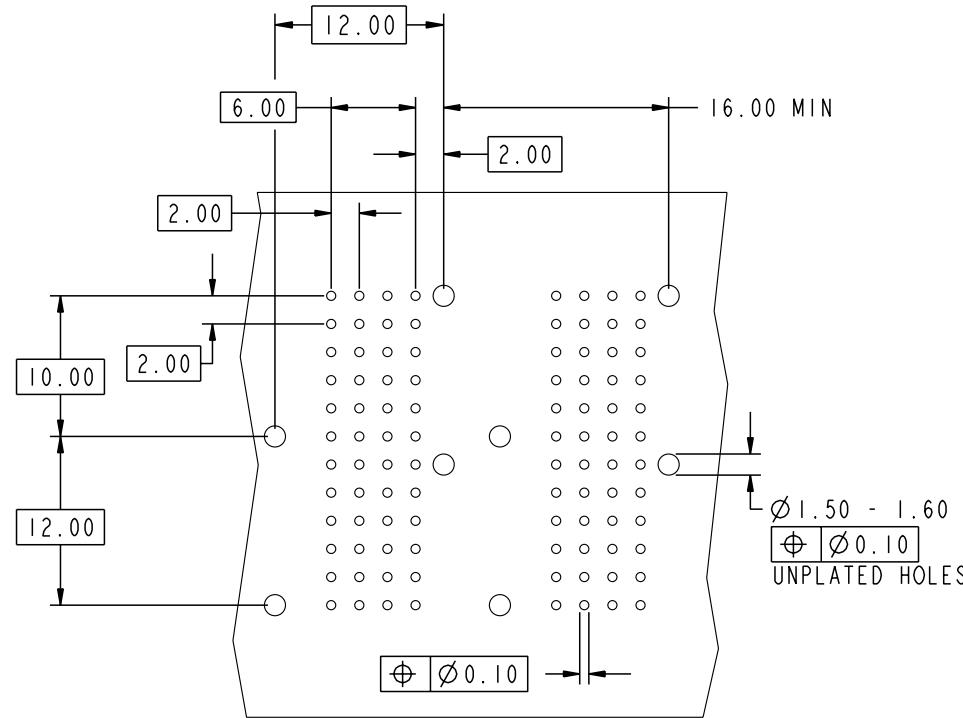
REQUIRED PC BOARD LAYOUT  
COMPONENT SIDE

SEE PRINT 58351 FOR  
ADDITIONAL PCB INFORMATION

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CODE	KEY	
	DIMENSIONS	
	DIM "A" MATE	DIM "B" TAIL
1	5.00	4.25
2	5.75	4.25
3	6.50	4.25
4	7.25	4.25
5	5.00	3.30
6	5.75	3.30
7	6.50	3.30
8	7.25	3.30
9	5.00	2.65
10	5.75	2.65
11	6.50	2.65
12	7.25	2.65
13	8.00	4.25

mat'l code				tolerances unless otherwise specified			CUSTOMER COPY	title	product family	code	
ltr	ecn no.	dr	date	linear	0. X ± 0. 3	projection					
V					0. XX ± 0. 13						
					.XXX ± .051						
				angles	0° ± 2°						
				dr	T.BRUNGARD	11/19/99	MM	A	METRAL SIGNAL HEADER 1 MOD. 4 ROW STB	213	
				engr	M.STRAWSER	11/19/99					
				chr	M.STRAWSER	11/19/99					
				oppd	M.STRAWSER	02/29/00					
sheet index		revision sheet					scale		dwg no		
							2 : 1				

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Pro/E

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cage code 22526

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PDM: Rev:V

STATUS: Released

Printed: Feb 14, 2006

A

B



A

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X01	D	I	I	I	I	I	I
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	I	I	I	I	I	I
	A	I	I	I	I	I	I

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METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X05	D	3	3	3	3	3	3
SEE NOTE 9 LEAD FREE OPTION	C	3	3	3	3	3	3
	B	3	3	3	3	3	3
	A	3	3	3	3	3	3

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METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X09	D	4	4	4	4	4	4
SEE NOTE 9 LEAD FREE OPTION	C	4	4	4	4	4	4
	B	4	4	4	4	4	4
	A	4	4	4	4	4	4

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METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X13	D	I	I	I	I	I	I
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	3	3	3	3	3	3
	A	I	I	I	I	I	I

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X02	D	I	I	I	I	I	I
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	I	I	I	I	I	I
	A	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X06	D	2	2	2	2	2	2
SEE NOTE 9 LEAD FREE OPTION	C	2	2	2	2	2	2
	B	2	2	2	2	2	2
	A	2	2	2	2	2	2

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X10	D	I	I	I	I	I	I
SEE NOTE 9 LEAD FREE OPTION	C	2	2	2	2	2	2
	B	3	3	3	3	3	3
	A	4	4	4	4	4	4

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X15	D	2	2	2	2	2	2
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	2	2	2	2	2	2
	A	I	I	I	I	I	I

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X03	D	3	3	3	3	3	3
SEE NOTE 9 LEAD FREE OPTION	C	2	2	2	2	2	2
	B	2	2	2	2	2	2
	A	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X07	D	3	3	3	3	3	3
SEE NOTE 9 LEAD FREE OPTION	C	2	2	2	2	2	2
	B	2	2	2	2	2	2
	A	I	I	I	I	I	I

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X11	D	3	3	3	3	3	3
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	3	3	3	3	3	3
	A	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X16	D	2	2	2	2	2	2
SEE NOTE 9 LEAD FREE OPTION	C	3	3	3	3	3	3
	B	4	4	4	4	4	4
	A	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X04	D	4	4	4	4	4	4
SEE NOTE 9 LEAD FREE OPTION	C	3	3	3	3	3	3
	B	3	3	3	3	3	3
	A	4	4	4	4	4	4

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X08	D	3	3	3	3	3	3
SEE NOTE 9 LEAD FREE OPTION	C	I	I	I	I	I	I
	B	I	I	I	I	I	I
	A	I	I	I	I	I	I

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X12	D	4	4	4	4	4	4
SEE NOTE 9 LEAD FREE OPTION	C	3	3	3	3	3	3
	B	2	2	2	2	2	2
	A	I	I	I	I	I	I

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X17	D	2	2	2	2	2	2
SEE NOTE 9 LEAD FREE OPTION	C	2	2	2	2	2	2
	B	2	2	2	2	2	2
	A	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. I					
1	2	3	4	5	6		


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METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X31	D	5	5	5	5	5	5
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	5	5	5	5	5	5
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X35	D	7	7	7	7	7	7
SEE NOTE 9 LEAD FREE OPTION	C	7	7	7	7	7	7
	B	7	7	7	7	7	7
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X39	D	8	8	8	8	8	8
SEE NOTE 9 LEAD FREE OPTION	C	8	8	8	8	8	8
	B	8	8	8	8	8	8
	A	8	8	8	8	8	8

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X43	D	5	5	5	5	5	5
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	7	7	7	7	7	7
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X32	D	5	5	5	5	5	5
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	5	5	5	5	5	5
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X36	D	6	6	6	6	6	6
SEE NOTE 9 LEAD FREE OPTION	C	6	6	6	6	6	6
	B	6	6	6	6	6	6
	A	6	6	6	6	6	6

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X40	D	5	5	5	5	5	5
SEE NOTE 9 LEAD FREE OPTION	C	6	6	6	6	6	6
	B	7	7	7	7	7	7
	A	8	8	8	8	8	8

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X45	D	6	6	6	6	6	6
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	6	6	6	6	6	6
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X33	D	7	7	7	7	7	7
SEE NOTE 9 LEAD FREE OPTION	C	6	6	6	6	6	6
	B	6	6	6	6	6	6
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X37	D	7	7	7	7	7	7
SEE NOTE 9 LEAD FREE OPTION	C	6	6	6	6	6	6
	B	6	6	6	6	6	6
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X41	D	7	7	7	7	7	7
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	7	7	7	7	7	7
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X46	D	6	6	6	6	6	6
SEE NOTE 9 LEAD FREE OPTION	C	7	7	7	7	7	7
	B	8	8	8	8	8	8
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X34	D	8	8	8	8	8	8
SEE NOTE 9 LEAD FREE OPTION	C	7	7	7	7	7	7
	B	7	7	7	7	7	7
	A	8	8	8	8	8	8

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X38	D	7	7	7	7	7	7
SEE NOTE 9 LEAD FREE OPTION	C	5	5	5	5	5	5
	B	5	5	5	5	5	5
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X42	D	8	8	8	8	8	8
SEE NOTE 9 LEAD FREE OPTION	C	7	7	7	7	7	7
	B	6	6	6	6	6	6
	A	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X47	D	6	6	6	6	6	6
SEE NOTE 9 LEAD FREE OPTION	C	6	6	6	6	6	6
	B	6	6	6	6	6	6
	A	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. I					
1	2	3	4	5	6		


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METRAL P/N	ROW	CONTACT CODE MOD. 1					
		1	2	3	4	5	6
88951-X65	D	1	1	1	1	1	1
SEE NOTE 9 LEAD FREE OPTION	C	1	1	1	1	1	1
	B	1	1	1	1	1	1
	A	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X69	D	12	12	12	12	12	12
SEE NOTE 9 LEAD FREE OPTION	C	12	12	12	12	12	12
	B	12	12	12	12	12	12
	A	12	12	12	12	12	12

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X73	D	9	9	9	9	9	9
SEE NOTE 9	C	9	9	9	9	9	9
LEAD FREE OPTION	B	1	1	1	1	1	1
	A	9	9	9	9	9	9

METRAL P/N	CONTACT CODE MOD. I						
	ROW	1	2	3	4	5	6
88951-X62	D	9	9	9	9	9	9
SEE NOTE 9 LEAD FREE OPTION	C	9	9	9	9	9	9
	B	9	9	9	9	9	9
	A	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. 1					
		1	2	3	4	5	6
88951-X66	D	1	0	1	0	1	0
SEE NOTE 9 LEAD FREE OPTION	C	1	0	1	0	1	0
	B	1	0	1	0	1	0
	A	1	0	1	0	1	0

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X70	D	9	9	9	9	9	9
SEE NOTE 9 LEAD FREE OPTION	C	10	10	10	10	10	10
	B	11	11	11	11	11	11
	A	12	12	12	12	12	12

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X75	D	1	0	1	0	1	0
SEE NOTE 9 LEAD FREE OPTION	C	9	9	9	9	9	9
	B	1	0	1	0	1	0
	A	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X63	D	1	1	1	1	1	1
SEE NOTE 9 LEAD FREE OPTION	C	10	10	10	10	10	10
	B	10	10	10	10	10	10
	A	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					
		1	2	3	4	5	6
88951-X67	D	1	1	1	1	1	1
SEE NOTE 9 LEAD FREE OPTION	C	10	10	10	10	10	10
	B	10	10	10	10	10	10
	A	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X71	D	1	1	1	1	1	1
SEE NOTE 9 LEAD FREE OPTION	C	9	9	9	9	9	9
	B	1	1	1	1	1	1
	A	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X76	D	1	0	1	0	1	0
SEE NOTE 9 LEAD FREE OPTION	C	1	1	1	1	1	1
	B	1	2	1	2	1	2
	A	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT		CODE MOD. I			
		1	2	3	4	5	6
88951-X64	D	12	12	12	12	12	12
SEE NOTE 9 LEAD FREE OPTION	C	11	11	11	11	11	11
	B	11	11	11	11	11	11
	A	12	12	12	12	12	12

METRAL P/N	ROW	CONTACT CODE MOD. 1					
		1	2	3	4	5	6
88951-X68	D	1	1	1	1	1	1
SEE NOTE 9 LEAD FREE OPTION	C	9	9	9	9	9	9
	B	9	9	9	9	9	9
	A	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X72	D	1	2	1	2	1	2
SEE NOTE 9 LEAD FREE OPTION	C	1	1	1	1	1	1
	B	10	10	10	10	10	10
	A	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. I					
		1	2	3	4	5	6
88951-X77	D	1	0	1	0	1	0
SEE NOTE 9 LEAD FREE OPTION	C	1	0	1	0	1	0
	B	1	0	1	0	1	0
	A	1	1	1	1	1	1

mat'l code				tolerances unless otherwise specified		CUSTOMER	COPY	projection	title	www.fciconnect.com	
ltr	ecn no.	dr	date	0.0 <sub>+</sub> 0.3							
V				0.0 <sub>+</sub> 0.13		angles	0° ± 2°	MM	product family	METRAL	code
				.051							
				0° ± 2°							
		dr	T.BRUNGARD	11/19/99							
		engr	M.STRAWSER	11/19/99		scale	2:1	dwg no	88951	sheet	
		chr	M.STRAWSER	11/19/99							
		oppd	M.STRAWSER	02/29/00							
sheet		revision									
index		sheet									
Pro/E				3		cage code		22526		4	

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PRODUCT NUMBER
88951-XYY
88951-XYLF

NOTES:

1. FOR DIM A AND B SEE SHEET 2 AND UP.
2. BODY MATERIAL: LIQUID CRYSTAL  
POLYMER 30 % GLASS.
3. PIN MATERIAL:  
PHOSPHOR BRONZE
4. PLATING ON SOLDER TO BOARD:  
88951 -XYY IS SnPb  
88951-XYLF IS Sn (LEAD FREE)  
PLATING ON CONTACT AREA CONFORMS TO PERFORMANCE LEVEL SHOWN IN TABLE.
5. PRODUCT MARKING:  
PART NUMBER DESIGNATION & BATCH I.D.

6. ALL PRODUCTS WITH PART NUMBERS SHOWN IN SUBSEQUENT TABLES WILL BE PACKAGED IN TUBES.  
IF TRAY PACKAGING IS REQUIRED, A SUFFIX "P"  
WILL BE ADDED TO THE END OF THE PART NUMBER.  
EXAMPLE: XXXXX-XXXP OR XXXXX-XXXPLF

7. PRODUCT SPECIFICATION GS-12-180  
APPLICATION SPECIFICATION BUS-20-074

⑧ THE PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET THE EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.

⑨ FOR LEAD FREE PART NUMBERS, ADD AN "LF" SUFFIX.  
EXAMPLE: 88951-X0ILF

10. ALL PRODUCTS EXCEPT THOSE WITH PART NUMBERS CONTAINING (DRAWING NO.)-NI--- OR (DRAWING NO.)-N5--- WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN. PART NUMBERS (DRAWING NO.)-NI--- AND (DRAWINGS NO.)-N5--- WILL NOT WITHSTAND REFLOW AND Au CONTACT SURFACE OF THE CONTACTS SHALL BE EXPOSED TO A MAXIMIM 140°C FOR NO LONGER THAN 15 SECONDS IN A WAVE SOLDER APPLICATION.

mat'l code				tolerances unless otherwise specified			CUSTOMER COPY	title	product family	code		
ltr	ecn no.	dr	date	linear	0. X ± 0.3	projection						
V					0. XX ± 0.13							
					.XXX ± .051							
				angles	0° ± 2°							
				dr	T.BRUNGARD	11/19/99	MM	scale	dwg no	code		
				engr	M.STRAWSER	11/19/99						
				chr	M.STRAWSER	11/19/99						
				appd	M.STRAWSER	02/29/00						
sheet		revision					A		88951			
index		sheet										

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Pro/E

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cage code  
22526

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PDM: Rev:V

STATUS: Released  
Printed: Feb 14, 2006