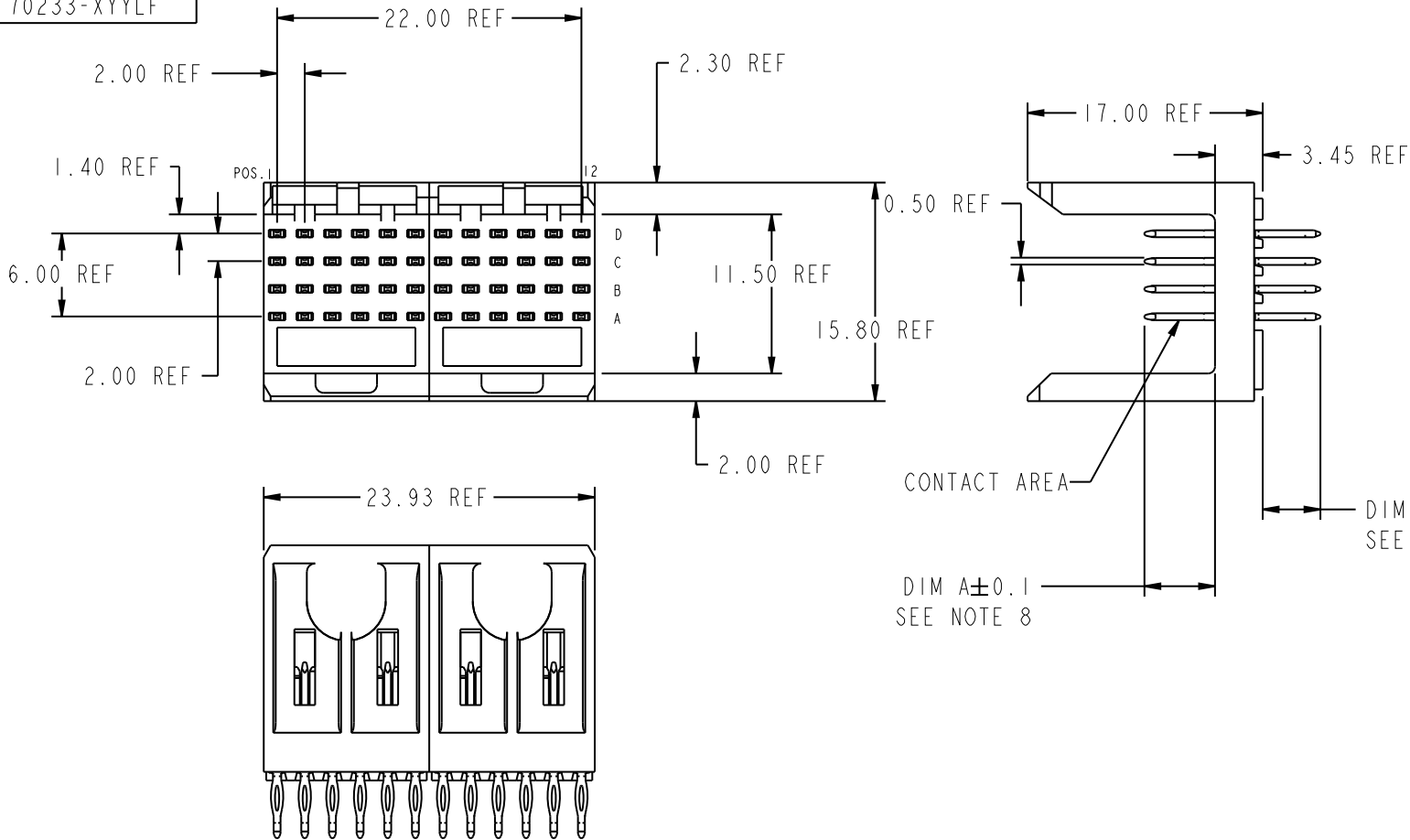


PRODUCT NUMBER  
70233-XYX  
70233-XYLF



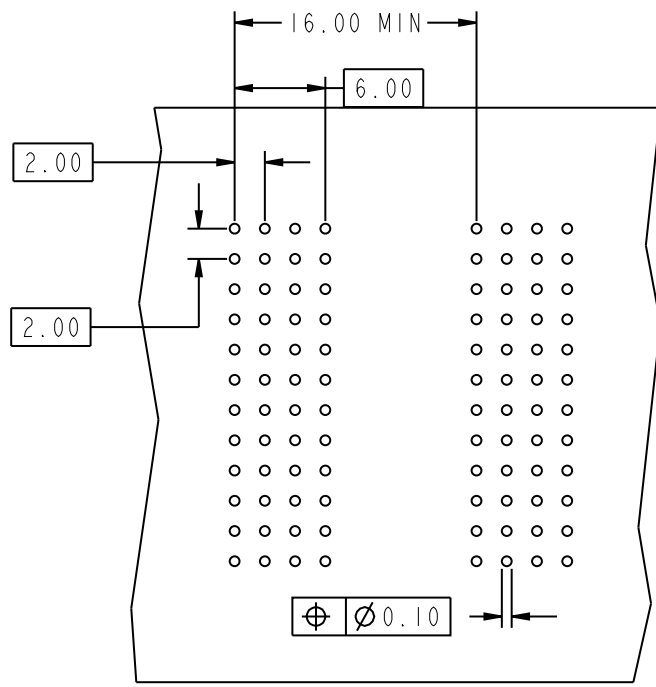
mat'l code				tolerances unless otherwise specified				CUSTOMER		FCJ www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3		COPY		title		
AF	V06-0498	DCH	2006-05-30		0.XX ±0.13		projection		METRAL SIGNAL HEADER 2 MOD, 4 ROW PRESS-FIT		
AG	DG09-0256	TER	2009-08-19		.XXX ±.051						
-	-	-	-	angles	0° ±2°				product family METRAL code		
AB	V04-0554	TAB	06/07/04	dr	T.BRUNGARD	11/19/99	MM		size		
AC	V05-0079	HTB	02/03/05	engr	M.STRAWSER	11/19/99	2:1		dwg no		
AD	V05-0030	DAI	02/10/05	chr	M.STRAWSER	11/19/99	A		70233		
AE	V05-1030	LP	11/18/05	appd	M.STRAWSER	02/29/00			sheet 213		
sheet		revision	AG	AG	AG	AG	AG	AG	AG	AG	
index		sheet	1	2	3	4	5	6	7	8	

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.

1 | 2

3 |

4



KEY		
CODE	DIMENSIONS	
	DIM "A" MATE	DIM "B" TAIL
1	5.00	4.30
2	5.75	4.30
3	6.50	4.30
4	7.25	4.30
5	5.00	13.60
6	5.75	13.60
7	6.50	13.60
8	7.25	13.60
9	5.00	17.00
10	5.75	17.00
11	6.50	17.00
12	7.25	17.00
13	8.25	4.30
14	8.25	13.60
15	8.25	17.00
19	8.00	4.30
20	8.00	13.60
21	8.00	17.00

REQUIRED PC BOARD LAYOUT  
COMPONENT SIDE

SEE PRINT 58351 FOR  
ADDITIONAL PCB INFORMATION



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.

mat'l code				--		tolerances unless otherwise specified		CUSTOMER		www.fcjconnect.com	
ltr	ecm no.	dr	date	linear	0.X ±0.3		COPY			title	
AG					0.XX ±0.13		projection			METRAL SIGNAL HEADER	
					.XXX ±.051					2 MOD, 4 ROW PRESS-FIT	
				angles	0° ±2°				product family		
		dr	T.BRUNGARD	11/19/99			scale		METRAL		
		enr	M.STRAWSER	11/19/99			1:1		code		
		chr	M.STRAWSER	11/19/99			A		size		
		appd	M.STRAWSER	02/29/00					dwg no		
sheet index		revision sheet								70233	
										213	
										sheet	
										2	

cage code 22526

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X10 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X11 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	1	1	1	1	1	1	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X12 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X13 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X14 SEE NOTE 11 LEAD FREE OPTION	D	4	4	4	4	4	4	4	4	4	4	4	4
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	4	4	4	4	4	4	4	4	4	4	4	4

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X15 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X16 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	2	2	2	2	2	2	2	2	2	2	2	2

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X17 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	1	1	1	1	1	1	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X18 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	1	1	1	1	1	1	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X19 SEE NOTE 11 LEAD FREE OPTION	D	4	4	4	4	4	4	4	4	4	4	4	4
	C	4	4	4	4	4	4	4	4	4	4	4	4
	B	4	4	4	4	4	4	4	4	4	4	4	4
	A	4	4	4	4	4	4	4	4	4	4	4	4

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X20 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X21 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	5	5	5	5	5	5	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X22 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X23 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X24 SEE NOTE 11 LEAD FREE OPTION	D	8	8	8	8	8	8	8	8	8	8	8	8
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	8	8	8	8	8	8	8	8	8	8	8	8



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		--		tolerances unless otherwise specified		CUSTOMER				www.fciconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3		COPY			title	
AG					0.XX ±0.13		projection			METRAL SIGNAL HEADER	
					.XXX ±.051					2 MOD, 4 ROW PRESS-FIT	
				angles	0° ±2°						
				dr	T.BRUNGARD	11/19/99			product family		code
				engr	M.STRAWSER	11/19/99			METRAL		213
				chr	M.STRAWSER	11/19/99			size		sheet
				appd	M.STRAWSER	02/29/00	scale		70233		3
sheet	revision										
index	sheet										

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.



METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X25 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X30 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	11	11	11	11	11	11	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X35 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	11	11	11	11	11	11	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X26 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	6	6	6	6	6	6	6	6	6	6	6	6

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X31 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	9	9	9	9	9	9	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X36 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	10	10	10	10	10	10	10	10	10	10	10	10

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X27 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	5	5	5	5	5	5	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X32 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	11	11	11	11	11	11	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X37 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	9	9	9	9	9	9	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X28 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	5	5	5	5	5	5	5	5	5	5	5	5

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X33 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	11	11	11	11	11	11	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X38 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	9	9	9	9	9	9	9	9	9	9	9	9

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X29 SEE NOTE 11 LEAD FREE OPTION	D	8	8	8	8	8	8	8	8	8	8	8	8
	C	8	8	8	8	8	8	8	8	8	8	8	8
	B	8	8	8	8	8	8	8	8	8	8	8	8
	A	8	8	8	8	8	8	8	8	8	8	8	8

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X34 SEE NOTE 11 LEAD FREE OPTION	D	12	12	12	12	12	12	12	12	12	12	12	12
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	12	12	12	12	12	12	12	12	12	12	12	12

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X39 SEE NOTE 11 LEAD FREE OPTION	D	12	12	12	12	12	12	12	12	12	12	12	12
	C	12	12	12	12	12	12	12	12	12	12	12	12
	B	12	12	12	12	12	12	12	12	12	12	12	12
	A	12	12	12	12	12	12	12	12	12	12	12	12

mat'l code		--		tolerances unless otherwise specified		CUSTOMER		FCJ		www.fcjconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3		COPY		projection	title	
AG					0.XX ±0.13		MM			METRAL SIGNAL HEADER	
					.XXX ±.051		1:1			2 MOD, 4 ROW PRESS-FIT	
				angles	0° ±2°		scale		product family		
				dr	T.BRUNGARD	11/19/99	A		METRAL		
				engr	M.STRAWSE	11/19/99	A		code		
				chr	M.STRAWSE	11/19/99	A		213		
				appd	M.STRAWSE	02/29/00	A		sheet		
sheet index	revision sheet						A		4		

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.



METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X40 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	4	4	4	4	4	4	4	4	4	4	4	4
	A	2	2	2	2	2	2	2	2	2	2	2	2
70233-X41 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	4	4	4	4	4	4	4	4	4	4	4	4
70233-X42 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	2	2	2	2	2	2	2	2	2	2	2	2
70233-X43 SEE NOTE 11 LEAD FREE OPTION	D	13	13	13	13	13	13	13	13	13	13	13	13
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	3	3	3	3	3	3	3	3	3	3	3	3
70233-X44 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	4	4	4	4	4	4	4	4	4	4	4	4
	A	3	3	3	3	3	3	3	3	3	3	3	3
70233-X45 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	4	4	4	4	4	4	4	4	4	4	4	4
70233-X46 SEE NOTE 11 LEAD FREE OPTION	D	19	19	19	19	19	19	19	19	19	19	19	19
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	3	3	3	3	3	3	3	3	3	3	3	3
70233-X47 SEE NOTE 11 LEAD FREE OPTION	D	4	4	4	4	4	4	4	4	4	4	4	4
	C	4	4	4	4	4	4	4	4	4	4	4	4
	B	13	13	13	13	13	13	13	13	13	13	13	13
	A	13	13	13	13	13	13	13	13	13	13	13	13
70233-X48 SEE NOTE 11 LEAD FREE OPTION	D	19	19	19	19	19	19	19	19	19	19	19	19
	C	19	19	19	19	19	19	19	19	19	19	19	19
	B	19	19	19	19	19	19	19	19	19	19	19	19
	A	19	19	19	19	19	19	19	19	19	19	19	19
70233-X49 SEE NOTE 11 LEAD FREE OPTION	D	4	4	4	4	4	4	4	4	4	4	4	4
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	3	3	3	3	3	3	3	3	3	3	3	3
70233-X50 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	8	8	8	8	8	8	8	8	8	8	8	8
	A	6	6	6	6	6	6	6	6	6	6	6	6
70233-X51 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	8	8	8	8	8	8	8	8	8	8	8	8
70233-X52 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	6	6	6	6	6	6	6	6	6	6	6	6
70233-X53 SEE NOTE 11 LEAD FREE OPTION	D	14	14	14	14	14	14	14	14	14	14	14	14
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	7	7	7	7	7	7	7	7	7	7	7	7
70233-X54 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	8	8	8	8	8	8	8	8	8	8	8	8
	A	7	7	7	7	7	7	7	7	7	7	7	7

mat'l code		--		tolerances unless otherwise specified		CUSTOMER		 www.fcjconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3	COPY		 title METRAL SIGNAL HEADER 2 MOD, 4 ROW PRESS-FIT	
AG					0.XX ±0.13	projection			
					.XXX ±.051	 product family METRAL code 213			
				angles	0° ±2°	MM		size	
				dr	T.BRUNGARD 11/19/99	scale		dwg no	
				enrg	M.STRAWSER 11/19/99	1:1		70233	
				chr	M.STRAWSER 11/19/99			sheet	
				appd	M.STRAWSER 02/29/00			5	
sheet index	revision sheet							cage code	
								22526	

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.



METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X55 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	8	8	8	8	8	8	8	8	8	8	8	8
70233-X56 SEE NOTE 11 LEAD FREE OPTION	D	20	20	20	20	20	20	20	20	20	20	20	20
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	7	7	7	7	7	7	7	7	7	7	7	7
70233-X57 SEE NOTE 11 LEAD FREE OPTION	D	8	8	8	8	8	8	8	8	8	8	8	8
	C	8	8	8	8	8	8	8	8	8	8	8	8
	B	14	14	14	14	14	14	14	14	14	14	14	14
	A	14	14	14	14	14	14	14	14	14	14	14	14
70233-X58 SEE NOTE 11 LEAD FREE OPTION	D	20	20	20	20	20	20	20	20	20	20	20	20
	C	20	20	20	20	20	20	20	20	20	20	20	20
	B	20	20	20	20	20	20	20	20	20	20	20	20
	A	20	20	20	20	20	20	20	20	20	20	20	20
70233-X59 SEE NOTE 11 LEAD FREE OPTION	D	8	8	8	8	8	8	8	8	8	8	8	8
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	7	7	7	7	7	7	7	7	7	7	7	7
70233-X60 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	12	12	12	12	12	12	12	12	12	12	12	12
	A	10	10	10	10	10	10	10	10	10	10	10	10
70233-X61 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	12	12	12	12	12	12	12	12	12	12	12	12
70233-X62 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	10	10	10	10	10	10	10	10	10	10	10	10
70233-X63 SEE NOTE 11 LEAD FREE OPTION	D	15	15	15	15	15	15	15	15	15	15	15	15
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X64 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	12	12	12	12	12	12	12	12	12	12	12	12
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X65 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	12	12	12	12	12	12	12	12	12	12	12	12
70233-X66 SEE NOTE 11 LEAD FREE OPTION	D	21	21	21	21	21	21	21	21	21	21	21	21
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X67 SEE NOTE 11 LEAD FREE OPTION	D	12	12	12	12	12	12	12	12	12	12	12	12
	C	12	12	12	12	12	12	12	12	12	12	12	12
	B	15	15	15	15	15	15	15	15	15	15	15	15
	A	15	15	15	15	15	15	15	15	15	15	15	15
70233-X68 SEE NOTE 11 LEAD FREE OPTION	D	21	21	21	21	21	21	21	21	21	21	21	21
	C	21	21	21	21	21	21	21	21	21	21	21	21
	B	21	21	21	21	21	21	21	21	21	21	21	21
	A	21	21	21	21	21	21	21	21	21	21	21	21
70233-X69 SEE NOTE 11 LEAD FREE OPTION	D	12	12	12	12	12	12	12	12	12	12	12	12
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	11	11	11	11	11	11	11	11	11	11	11	11

mat'l code		--		tolerances unless otherwise specified		CUSTOMER		 www.fcjconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3	COPY		 title METRAL SIGNAL HEADER 2 MOD, 4 ROW PRESS-FIT	
AG					0.XX ±0.13	projection			
					.XXX ±.051	 product family METRAL code 213			
				angles	0° ±2°	 size A 70233 sheet 6			
				dr	T.BRUNGARD 11/19/99	scale		cage code 22526	
				enr	M.STRAWSER 11/19/99	1:1			
				chr	M.STRAWSER 11/19/99				
				appd	M.STRAWSER 02/29/00				
sheet index	revision sheet								

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.



METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X70 SEE NOTE 11 LEAD FREE OPTION	D	4	4	4	4	4	4	4	4	4	4	4	4
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	2	2	2	2	2	2	2	2	2	2	2	2

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X71 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X72 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	4	4	4	4	4	4	4	4	4	4	4	4
	B	4	4	4	4	4	4	4	4	4	4	4	4
	A	19	19	19	19	19	19	19	19	19	19	19	19

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X73 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X74 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X75 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X76 SEE NOTE 11 LEAD FREE OPTION	D	19	19	19	19	19	19	19	19	19	19	19	19
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	1	1	1	1	1	1	1	1	1	1	1	1
	A	19	19	19	19	19	19	19	19	19	19	19	19

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X77 SEE NOTE 11 LEAD FREE OPTION	D	2	2	2	2	2	2	2	2	2	2	2	2
	C	3	3	3	3	3	3	3	3	3	3	3	3
	B	19	19	19	19	19	19	19	19	19	19	19	19
	A	3	3	3	3	3	3	3	3	3	3	3	3

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X78 SEE NOTE 11 LEAD FREE OPTION	D	1	1	1	1	1	1	1	1	1	1	1	1
	C	1	1	1	1	1	1	1	1	1	1	1	1
	B	3	3	3	3	3	3	3	3	3	3	3	3
	A	1	1	1	1	1	1	1	1	1	1	1	1

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X79 SEE NOTE 11 LEAD FREE OPTION	D	3	3	3	3	3	3	3	3	3	3	3	3
	C	2	2	2	2	2	2	2	2	2	2	2	2
	B	2	2	2	2	2	2	2	2	2	2	2	2
	A	2	2	2	2	2	2	2	2	2	2	2	2

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X80 SEE NOTE 11 LEAD FREE OPTION	D	8	8	8	8	8	8	8	8	8	8	8	8
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	6	6	6	6	6	6	6	6	6	6	6	6

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X81 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X82 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	8	8	8	8	8	8	8	8	8	8	8	8
	B	8	8	8	8	8	8	8	8	8	8	8	8
	A	20	20	20	20	20	20	20	20	20	20	20	20

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X83 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	7	7	7	7	7	7	7	7	7	7	7	7

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X84 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	7	7	7	7	7	7	7	7	7	7	7	7

mat'l code		--		tolerances unless otherwise specified		CUSTOMER		FCJ		www.fcjconnect.com	
lfr	ecr no.	dr	date	linear	0.X ±0.3	COPY		projection	title		
AG					0.XX ±0.13	MM			METRAL SIGNAL HEADER		
					.XXX ±.051	1:1			2 MOD, 4 ROW PRESS-FIT		
				angles	0° ±2°	scale		product family		code	
				dr	T.BRUNGARD	11/19/99	A		METRAL		213
				engr	M.STRAWSER	11/19/99	A		size		7
				chr	M.STRAWSER	11/19/99	A		dwg no		70233
				appd	M.STRAWSER	02/29/00	A		sheet		7
sheet index	revision sheet								cage code		22526

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.



METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X85 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	7	7	7	7	7	7	7	7	7	7	7	7
70233-X86 SEE NOTE 11 LEAD FREE OPTION	D	20	20	20	20	20	20	20	20	20	20	20	20
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	5	5	5	5	5	5	5	5	5	5	5	5
	A	20	20	20	20	20	20	20	20	20	20	20	20
70233-X87 SEE NOTE 11 LEAD FREE OPTION	D	6	6	6	6	6	6	6	6	6	6	6	6
	C	7	7	7	7	7	7	7	7	7	7	7	7
	B	20	20	20	20	20	20	20	20	20	20	20	20
	A	7	7	7	7	7	7	7	7	7	7	7	7
70233-X88 SEE NOTE 11 LEAD FREE OPTION	D	5	5	5	5	5	5	5	5	5	5	5	5
	C	5	5	5	5	5	5	5	5	5	5	5	5
	B	7	7	7	7	7	7	7	7	7	7	7	7
	A	5	5	5	5	5	5	5	5	5	5	5	5
70233-X89 SEE NOTE 11 LEAD FREE OPTION	D	7	7	7	7	7	7	7	7	7	7	7	7
	C	6	6	6	6	6	6	6	6	6	6	6	6
	B	6	6	6	6	6	6	6	6	6	6	6	6
	A	6	6	6	6	6	6	6	6	6	6	6	6

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X90 SEE NOTE 11 LEAD FREE OPTION	D	12	12	12	12	12	12	12	12	12	12	12	12
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	10	10	10	10	10	10	10	10	10	10	10	10
70233-X91 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X92 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	12	12	12	12	12	12	12	12	12	12	12	12
	B	12	12	12	12	12	12	12	12	12	12	12	12
	A	21	21	21	21	21	21	21	21	21	21	21	21
70233-X93 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X94 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	11	11	11	11	11	11	11	11	11	11	11	11

METRAL P/N	ROW	CONTACT CODE MOD. 1					MOD. 2						
		1	2	3	4	5	6	7	8	9	10	11	12
70233-X95 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X96 SEE NOTE 11 LEAD FREE OPTION	D	21	21	21	21	21	21	21	21	21	21	21	21
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	9	9	9	9	9	9	9	9	9	9	9	9
	A	21	21	21	21	21	21	21	21	21	21	21	21
70233-X97 SEE NOTE 11 LEAD FREE OPTION	D	10	10	10	10	10	10	10	10	10	10	10	10
	C	11	11	11	11	11	11	11	11	11	11	11	11
	B	21	21	21	21	21	21	21	21	21	21	21	21
	A	11	11	11	11	11	11	11	11	11	11	11	11
70233-X98 SEE NOTE 11 LEAD FREE OPTION	D	9	9	9	9	9	9	9	9	9	9	9	9
	C	9	9	9	9	9	9	9	9	9	9	9	9
	B	11	11	11	11	11	11	11	11	11	11	11	11
	A	9	9	9	9	9	9	9	9	9	9	9	9
70233-X99 SEE NOTE 11 LEAD FREE OPTION	D	11	11	11	11	11	11	11	11	11	11	11	11
	C	10	10	10	10	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10	10	10	10	10
	A	10	10	10	10	10	10	10	10	10	10	10	10

mat'l code		--		tolerances unless otherwise specified		CUSTOMER		 www.fcjconnect.com	
ltr	ecr no.	dr	date	linear	0.X ±0.3	COPY		 title METRAL SIGNAL HEADER 2 MOD, 4 ROW PRESS-FIT	
AG					0.XX ±0.13	projection			
					.XXX ±.051	 product family METRAL code			
				angles	0° ±2°	 size A 70233		213	
				dr	T.BRUNGARD 11/19/99	 scale 1:1		8	
				enrg	M.STRAWSER 11/19/99				
				chr	M.STRAWSER 11/19/99				
				appd	M.STRAWSER 02/29/00				
sheet index	revision sheet								



PRODUCT NUMBER
70233-XYX
70233-XYLFF

NOTES:

- FOR DIM A AND B SEE SHEET 2 AND UP.
- BODY MATERIAL: LIQUID CRYSTAL  
POLYMER 30 % GLASS.  
FLAME RETARDANT ACC. UL 94-V0.
- PIN MATERIAL:  
PHOSPHOR BRONZE.
- PLATING ON PRESS-FIT TAIL:  
55422 -XYX IS SnPb  
55422-XYLFF IS SN (LEAD FREE)  
PLATING ON CONTACT AREA CONFORMS TO PERFORMANCE LEVEL SHOWN IN TABLE.
- PRODUCT MARKING:  
PART NUMBER DESIGNATION & BATCH I.D.
- 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
- PRODUCT SPECIFICATION GS-12-180  
APPLICATION SPECIFICATION BUS-20-073

- AFTER INSERTION INTO CIRCUIT BOARD WITH QUALIFIED TOOL.
- A PLATING HAS Au FLASH IN PRESS FIT AREA (LEAD FREE).
- 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 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. PART NUMBERS (DRAWING NO.)-N1--- AND (DRAWINGS NO.)-N5---WILL NOT WITHSTAND REFLOW AND Au CONTACT SURFACE OF THE CONTACTS SHALL BE EXPOSED TO A MAXIMUM 140°C FOR NO LONGER THAN 15 SECONDS IN A WAVE SOLDER APPLICATION.

- FOR LEAD FREE PART NUMBERS, ADD AN "LF" SUFFIX. EXAMPLE: 70233-X01LF

PLATING IN CONTACT AREA		
DASH NUMBER	PERFORMANCE LEVEL	NOTES
-AYY	TELCORDIA CO	SEE NOTE 9
-N1YY	TELCORDIA CO (NXT)	-
-N5YY	TELCORDIA UE (NXT)	-
-1YY	TELCORDIA CO	-
-2YY	TELECOM CLASS	-
-3YY	IEC CLASS I	-
-5YY	TELCORDIA UE	-
-AYLFF	TELCORDIA CO	SEE NOTE 10
-N1YLFF	TELCORDIA CO (NXT) IEC CLASS I	SEE NOTE 10
-N5YLFF	TELCORDIA UE (NXT)	SEE NOTE 10
-1YLFF	TELCORDIA CO IEC CLASS I	SEE NOTE 10
-2YLFF	TELECOM CLASS	SEE NOTE 10
-5YLFF	TELCORDIA UE	SEE NOTE 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.

mat'l code				tolerances unless otherwise specified		CUSTOMER	FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	0.X ±0.3	COPY	title METRAL SIGNAL HEADER 2 MOD, 4 ROW PRESS-FIT	
AG			0.XX ±0.13		projection			
			.XXX ±.051					
				angles	0° ±2°		product family METRAL code	
		dr	T.BRUNGARD	11/19/99		size	dwg no	213
		enrg	M.STRAWSER	11/19/99		A	70233	sheet
		chr	M.STRAWSER	11/19/99	scale			9
		appd	M.STRAWSER	02/29/00	1:1			
sheet index	revision sheet							

cage code 22526