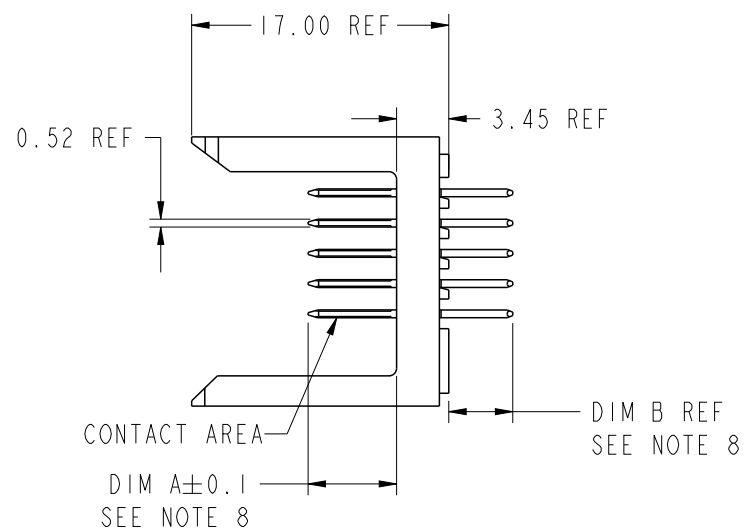
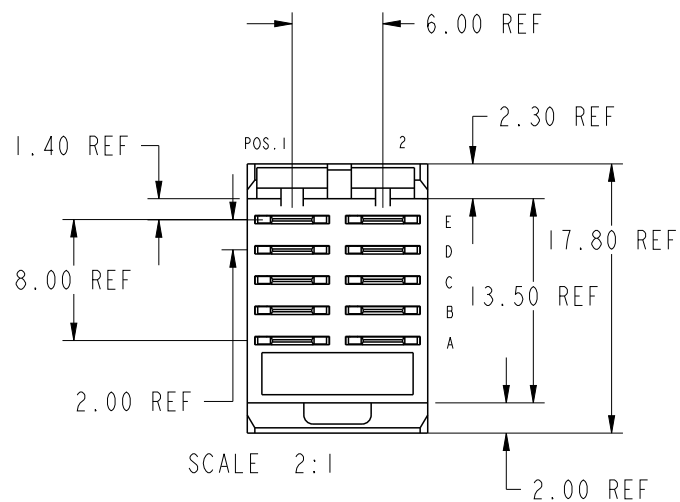
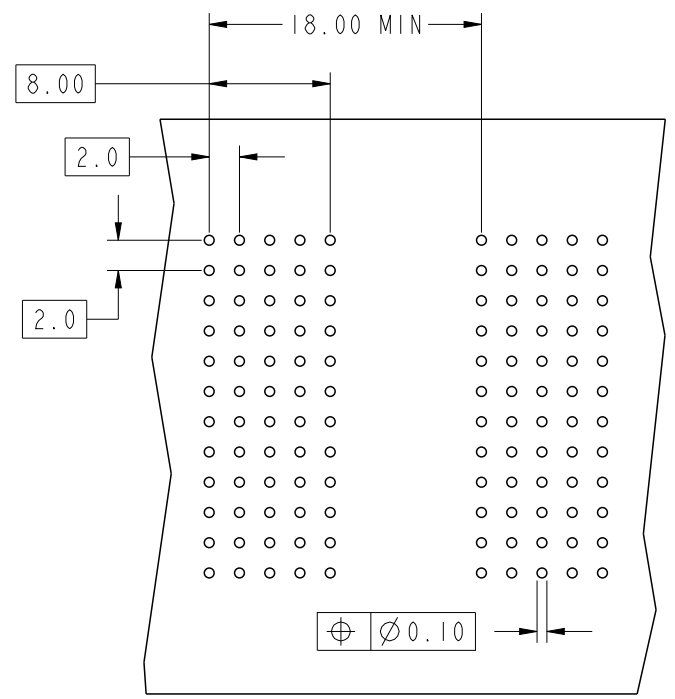
PLATING IN CONTACT AREA

DASH NUMBER	PERFORMANCE LEVEL	NOTES
-1YY	TELCORDIA CO	-
-2YY	TELECOM CLASS	-
-3YY	IEC CLASS I	-
-5YY	TELCORDIA UE	-
-1YYLF	TELCORDIA CO IEC CLASS I	SEE NOTE 9
-2YYLF	TELECOM CLASS	SEE NOTE 9
-5YYLF	TELCORDIA UE	SEE NOTE 9

spec ref *				dr Terran Huang 2010/07/08		projection 	mm 	size A4	scale 2:1
tolerance std ISO 406 ISO 1101				eng Andy Lu 2013/10/22				ecn no ELX-DG-16119-1	rel level Released
TOLERANCES UNLESS OTHERWISE SPECIFIED				chr Sun Richard 2013/10/24					
				appr Pei-Ming Zheng 2013/10/24		product family METRAL			
surface 3.200 linear 		0.X	±0.3		title METRAL POWER HEADER 1 MOD, 5 ROW PRESS-FIT		dwg no 89099		rev AV
		0.XX	±0.13						
		0.XXX	±0.051						
ISO 1302		angular 0°	±2°	www.fci.com	cat. no. -	Product - Customer Drw			sheet 1 of 6



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SCALE 2:1

REQUIRED PC BOARD LAYOUT
COMPONENT SIDE

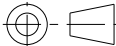
SEE PRINT 58351 FOR ADDITIONAL
PCB INFORMATION.

KEY		
CODE	DIMENSIONS	
	DIM "A" MATE	DIM "B" TAIL
P01	6.50	4.30
P02	7.25	4.30
P03	8.00	4.30
P04	6.50	13.60
P05	7.25	13.60
P06	8.00	13.60
P07	6.50	17.00
P08	7.25	17.00
P09	8.00	17.00
PI6	5.00	4.30
PI7	5.75	4.30

spec ref *				dr	Terran Huang	2010/07/08	projection	mm	size	A4	scale	2:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Lu	2013/10/22			ecn no		ELX-DG-16119-1		
				chr	Sun Richard	2013/10/24			rel level		Released		
				appr	Pei-Ming Zheng	2013/10/24			product family		METRAL		
surface 3.200	linear	0.X	±0.3		title	METRAL POWER HEADER			dwg no	89099		rev	AW
		0.XX	±0.13										
		0.XXX	±0.051										
		ISO 1302	angular										
				www.fci.com	cat. no.	-	Product - Customer Drw				sheet 2 of 6		



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METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I							
			I	2				I	2				I	2				I	2						
89099-X01		E	P16	P16	89099-X05		E	P01	P01	89099-X11		E	P01	P01	89099-X15		E	P02	P02						
SEE NOTE 10 LEAD FREE OPTION		D	P16	P16	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P02	P02						
		C	P16	P16			C	P02	P02			C	P01	P01			C	P02	P02						
		B	P16	P16			B	P03	P03			B	P01	P01			B	P02	P02						
		A	P16	P16			A	P03	P03			A	P01	P01			A	P02	P02						
METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I							
			I	2				I	2				I	2				I	2						
89099-X02		E	P16	P16	89099-X06		E	P17	P17	89099-X12		E	P01	P01	89099-X16		E	P01	P01						
SEE NOTE 10 LEAD FREE OPTION		D	P16	P16	SEE NOTE 10 LEAD FREE OPTION		D	P17	P17	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01						
		C	P16	P16			C	P17	P17			C	P01	P01			C	P02	P02						
		B	P16	P16			B	P17	P17			B	P03	P03			B	P02	P02						
		A	P01	P01			A	P17	P17			A	P01	P01			A	P03	P03						
METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I							
			I	2				I	2				I	2				I	2						
89099-X03		E	P17	P17	89099-X07		E	P02	P02	89099-X13		E	P01	P01	89099-X17		E	P01	P01						
SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P02	P02	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01						
		C	P17	P17			C	P02	P02			C	P02	P02			C	P01	P01						
		B	P17	P17			B	P02	P02			B	P03	P03			B	P01	P01						
		A	P01	P01			A	P02	P02			A	P03	P03			A	P03	P03						
METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I							
			I	2				I	2				I	2				I	2						
89099-X04		E	P17	P17	89099-X10		E	P01	P01	89099-X14		E	P03	P03	89099-X18		E	P01	P01						
SEE NOTE 10 LEAD FREE OPTION		D	P17	P17	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01	SEE NOTE 10 LEAD FREE OPTION		D	P03	P03	SEE NOTE 10 LEAD FREE OPTION		D	P01	P01						
		C	P17	P17			C	P02	P02			C	P03	P03			C	P03	P03						
		B	P02	P02			B	P03	P03			B	P03	P03			B	P03	P03						
		A	P17	P17			A	P02	P02			A	P03	P03			A	P03	P03						
METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I		METRAL P/N		ROW	CONTACT CODE MOD. I							
			I	2				I	2				I	2				I	2						
89099-X20		E	P04	P04	89099-X21		E	P04	P04	89099-X22		E	P04	P04	89099-X23		E	P04	P04						
SEE NOTE 10 LEAD FREE OPTION		D	P04	P04	SEE NOTE 10 LEAD FREE OPTION		D	P04	P04	SEE NOTE 10 LEAD FREE OPTION		D	P04	P04	SEE NOTE 10 LEAD FREE OPTION		D	P04	P04						
		C	P05	P05			C	P04	P04			C	P04	P04			C	P05	P05						
		B	P06	P06			B	P04	P04			B	P06	P06			B	P06	P06						
		A	P05	P05			A	P04	P04			A	P04	P04			A	P06	P06						
spec ref		*		dr		Terran Huang		2010/07/08		projection				mm		size		A4		scale		1:1			
tolerance std		ISO 406		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		Andy Lu		2013/10/22		chr		Sun Richard		2013/10/24		ecn no		ELX-DG-16119-1		rel level		Released	
ISO 1101						appr		Pei-Ming Zheng		2013/10/24		product family		METRAL		dwg no		89099		rev		AW			
surface		3.200		linear				title		METRAL POWER HEADER		cat. no.		-		Product - Customer Drw		sheet 3 of 6							
ISO 1302		angular		0° ±2°		www.fci.com		cat. no.		-		Product - Customer Drw		sheet 3 of 6											



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METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X24 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06
	D	P06	P06
	C	P06	P06
	B	P06	P06
	A	P06	P06

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X25 SEE NOTE 10 LEAD FREE OPTION	E	P05	P05
	D	P05	P05
	C	P05	P05
	B	P05	P05
	A	P05	P05

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X26 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P04	P04
	C	P05	P05
	B	P05	P05
	A	P06	P06

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X27 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P04	P04
	C	P04	P04
	B	P04	P04
	A	P06	P06

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X28 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P04	P04
	C	P06	P06
	B	P06	P06
	A	P06	P06

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X30 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P08	P08
	B	P09	P09
	A	P08	P08

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X31 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P07	P07
	B	P07	P07
	A	P07	P07

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X32 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P07	P07
	B	P09	P09
	A	P07	P07

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X33 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P08	P08
	B	P09	P09
	A	P09	P09

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X34 SEE NOTE 10 LEAD FREE OPTION	E	P09	P09
	D	P09	P09
	C	P09	P09
	B	P09	P09
	A	P09	P09

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X35 SEE NOTE 10 LEAD FREE OPTION	E	P08	P08
	D	P08	P08
	C	P08	P08
	B	P08	P08
	A	P08	P08

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X36 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P08	P08
	B	P08	P08
	A	P09	P09

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X37 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P07	P07
	B	P07	P07
	A	P09	P09

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X38 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07
	D	P07	P07
	C	P09	P09
	B	P09	P09
	A	P09	P09

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X39 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P01	P01
	C	P01	P01
	B	P01	P01
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X40 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02
	D	P01	P01
	C	P02	P02
	B	P01	P01
	A	P02	P02

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X41 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P03	P03
	C	P03	P03
	B	P03	P03
	A	P02	P02

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X42 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P02	P02
	C	P02	P02
	B	P02	P02
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X43 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P03	P03
	C	P03	P03
	B	P02	P02
	A	P02	P02

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X44 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P03	P03
	C	P03	P03
	B	P16	P16
	A	P03	P03

spec ref *		dr Terran Huang		2010/07/08		projection 	mm 	size A4	scale 1:1
tolerance std		eng Andy Lu		2013/10/22				ecn no ELX-DG-16119-1	
ISO 406 ISO 1101		chr Sun Richard		2013/10/24				rel level Released	
surface 3.200 linear		0.X ±0.3			title METRAL POWER HEADER 1 MOD, 5 ROW PRESS-FIT		dwg no 89099		rev AW
		0.XX ±0.13							
		0.XXX ±0.051							
ISO 1302		angular 0° ±2°	www.fci.com		cat. no. -		Product - Customer Drw		sheet 4 of 6

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METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I	
		I	2			I	2			I	2			I	2			I	2
89099-X45	E	P03	P03	89099-X49	E	P02	P02	89099-X53	E	P05	P05	89099-X57	E	P03	P03	89099-X61	E	P03	P03
SEE NOTE 10 LEAD FREE OPTION	D	P02	P02		D	P03	P03		D	P05	P05		D	P01	P01		D	P03	P03
	C	P17	P17		C	P03	P03		C	P06	P06		C	P01	P01		C	P02	P02
	B	P17	P17		B	P03	P03		B	P04	P04		B	P01	P01		B	P01	P01
	A	P17	P17		A	P02	P02		A	P04	P04		A	P03	P03		A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I	
		I	2			I	2			I	2			I	2
89099-X46 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03	89099-X50 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X54 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02	89099-X58 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P03	P03		D	P01	P01		D	P02	P02		D	P03	P03
	C	P01	P01		C	P03	P03		C	P03	P03		C	P01	P01
	B	P03	P03		B	P01	P01		B	P01	P01		B	P03	P03
	A	P01	P01		A	P01	P01		A	P01	P01		A	P01	P01
89099-X62 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06	89099-X62 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06	89099-X62 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06	89099-X62 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06
	D	P05	P05		D	P05	P05		D	P05	P05		D	P05	P05
	C	P05	P05		C	P05	P05		C	P05	P05		C	P05	P05
	B	P06	P06		B	P06	P06		B	P06	P06		B	P06	P06
	A	P05	P05		A	P05	P05		A	P05	P05		A	P05	P05

METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I					
		I	2			I	2			I	2			I	2				
89099-X47	E	P01	P01	89099-X51	E	P01	P01	89099-X55	E	P02	P02	89099-X59	E	P16	P16	89099-X63	E	P01	P01
SEE NOTE 10 LEAD FREE OPTION	D	P01	P01	SEE NOTE 10 LEAD FREE OPTION	D	P01	P01	SEE NOTE 10 LEAD FREE OPTION	D	P02	P02	SEE NOTE 10 LEAD FREE OPTION	D	P03	P03	SEE NOTE 10 LEAD FREE OPTION	D	P02	P02
	C	P02	P02		C	P16	P16		C	P02	P02		C	P03	P03		C	P01	P01
	B	P03	P03		B	P01	P01		B	P03	P03		B	P03	P03		B	P02	P02
	A	P02	P02		A	P01	P01		A	P03	P03		A	P03	P03		A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I		METRAL P/N	ROW	CONTACT CODE MOD. I					
		I	2			I	2			I	2			I	2				
89099-X48	E	P04	P04	89099-X52	E	P03	P03	89099-X56	E	P05	P05	89099-X60	E	P01	P01	89099-X64	E	P02	P02
SEE NOTE 10 LEAD FREE OPTION	D	P04	P04		D	P02	P02		D	P05	P05		D	P01	P01		D	P02	P02
	C	P06	P06		C	P03	P03		C	P05	P05		C	P03	P03		C	P01	P01
	B	P04	P04		B	P03	P03		B	P05	P05		B	P03	P03		B	P03	P03
	A	P04	P04		A	P03	P03		A	P04	P04		A	P01	P01		A	P01	P01

spec ref		*		dr	Terran Huang	2010/07/08	projection 	mm 	size	A4	scale	1:1
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Lu	2013/10/22			ecn no	ELX-DG-16119-1		
ISO 406 ISO 1101				chr	Sun Richard	2013/10/24			rel level	Released		
				appr	Pei-Ming Zheng	2013/10/24	product family		METRAL			
surface	3.200 linear	0.X	±0.3		title	METRAL POWER HEADER 1 MOD, 5 ROW PRESS-FIT		dwg no	89099		rev AV	
		0.XX	±0.13									
		0.XXX	±0.051									
ISO 1302	angular	0°	±2°	www.fci.com	cat. no.	-		Product - Customer Drw			sheet 5 of 6	



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METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X65 SEE NOTE 10 LEAD FREE OPTION	E	P17	P17
	D	P03	P03
	C	P03	P03
	B	P03	P03
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X66 ----- 89099-X66LF	E	P17	P17
	D	P17	P17
	C	P02	P02
	B	P02	P02
	A	P17	P17

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X67 ----- 89099-X67LF	E	P01	P01
	D	P02	P02
	C	P02	P02
	B	P03	P03
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X68 ----- 89099-X68LF	E	P01	P01
	D	P02	P02
	C	P02	P02
	B	P02	P02
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X69 ----- 89099-X69LF	E	P03	P03
	D	P16	P16
	C	P16	P16
	B	P16	P16
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X70 ----- 89099-X70LF	E	P01	P01
	D	P03	P01
	C	P03	P03
	B	P03	P03
	A	P03	P02

METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X71 ----- 89099-X71LF	E	P03	P03
	D	P03	P03
	C	P03	P02
	B	P03	P02
	A	P03	P03

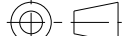
METRAL P/N	ROW	CONTACT CODE MOD. I	
		1	2
89099-X72 ----- 89099-X72LF	E	P01	P01
	D	P02	P02
	C	P16	P16
	B	-	-
	A	P02	P02

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:
89099 -XXX IS SnPb
89099-XXYLF 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-20-075
- AFTER INSERTION INTO CIRCUIT BOARD WITH
QUALIFIED TOOL.
- THE PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET THE
EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS
AS DESCRIBED IN GS-22-008.
- FOR LEAD FREE PART NUMBERS, ADD AN "LF" SUFFIX.
EXAMPLE: 89099-X01LF
- ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR
60 SECONDS IN CONVECTION, INFAR-RED OR VAPOR PHASE
REFLOW OVEN.

spec ref *				dr Terran Huang2010/07/08		projection 	mm 	sizeA4	scale1:1		
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng Andy Lu2013/10/22				ecn noELX-DG-16119-1			
				chr Sun Richard2013/10/24				rel levelReleased			
				appr Pei-Ming Zheng2013/10/24							
surface 3.200linear		0.X	±0.3		titleMETRAL POWER HEADER 1 MOD, 5 ROW PRESS-FIT				dwg no89099	revAV	
		0.XX	±0.13								
ISO 1302		0.XXX	±0.051								
angular		0°	±2°	www.fci.com		cat. no. -		Product - Customer Drw		sheet 6 of 6	