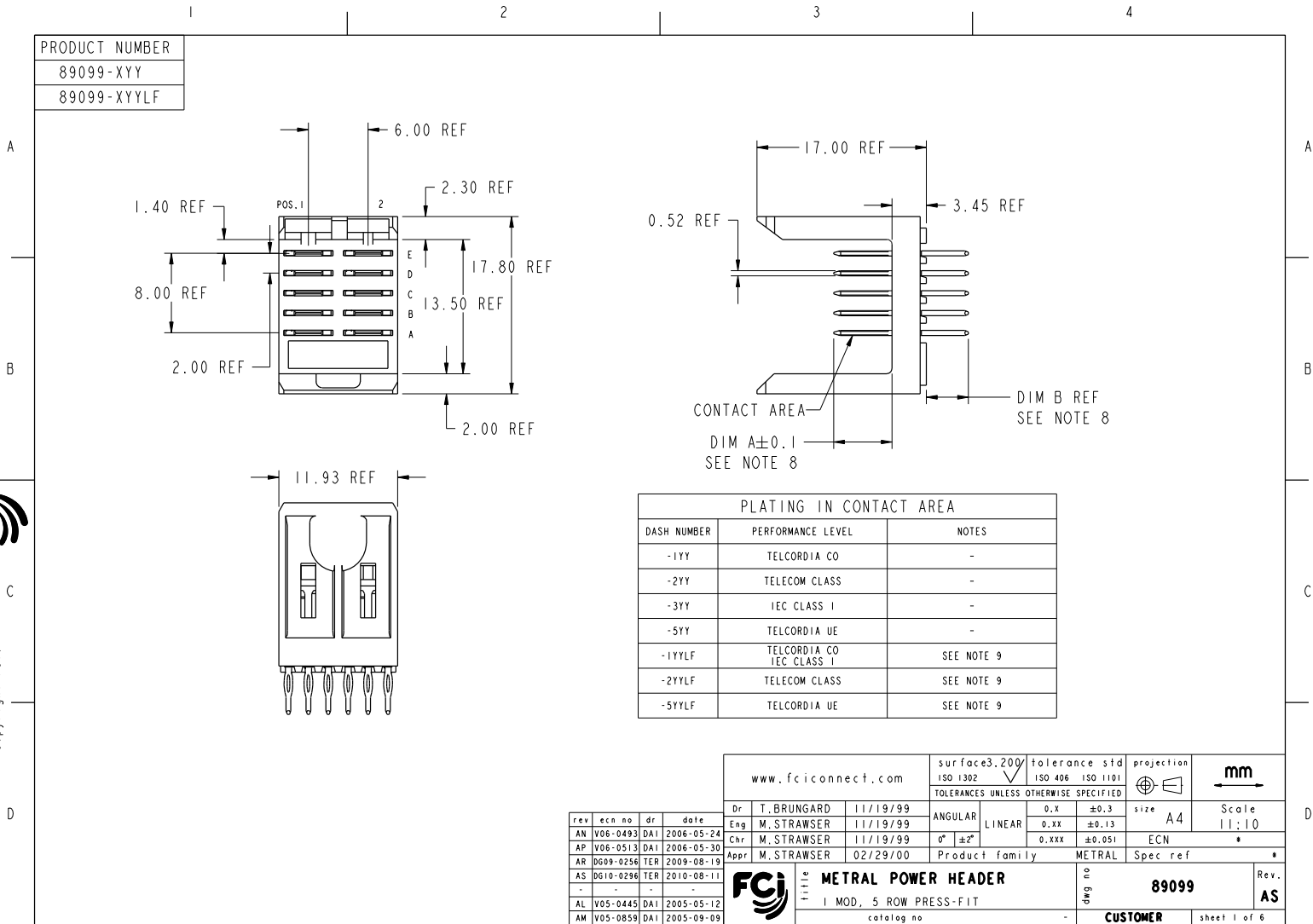


PRODUCT NUMBER
89099-XYX
89099-XYLX



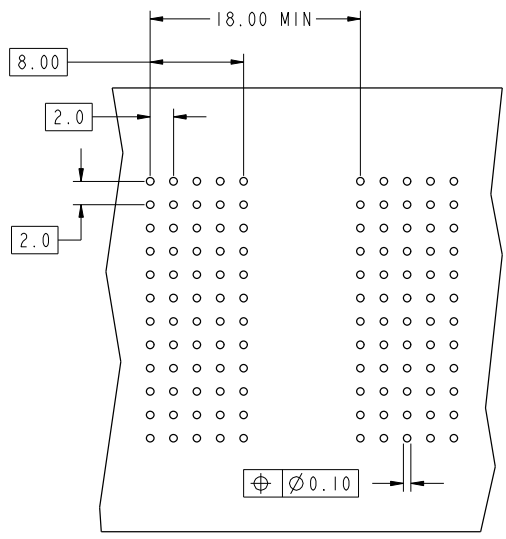
www.fciconnect.com		surface 3.200	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101	ISO 1302	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr. T. BRUNGARD 11/19/99		ANGULAR	0.x ±0.3	size A4	Scale 11:10
Eng. M. STRAWSER 11/19/99		LINEAR	0.xx ±0.13	ECN	*
Chr. M. STRAWSER 11/19/99		0° ±2°	0.xxx ±0.051	Spec ref	*
Appr. M. STRAWSER 02/29/00		Product family	METRAL		
rev ecn no dr date		FCJ METRAL POWER HEADER		89099	Rev. AS
AN V06-0493 DAI 2006-05-24		I MOD, 5 ROW PRESS-FIT		CUSTOMER	sheet 1 of 6
AP V06-0513 DAI 2006-05-30		catalog no			
AR 0609-0256 TER 2009-08-19					
AS 0610-0296 TER 2010-08-11					
AL V05-0445 DAI 2005-05-12					
AM V05-0859 DAI 2005-09-09					

PDM: Rev:AS STATUS:Released⁴ Printed: Aug 17, 2010

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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
P16	5.00	4.30
P17	5.75	4.30

www.fciconnect.com		surface 3.200 ISO 1302	tolerance std ISO 406 ISO 1101	projection ISO 1101	mm
TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	T. BRUNGARD	11/19/99	ANGULAR	LINEAR	0.x ±0.3 0.xx ±0.13 0.xxx ±0.051
Eng	M. STRAWSER	11/19/99	0° ±2°		size A4 Scale 21:10
Chr	M. STRAWSER	11/19/99			ECN *
Appr	M. STRAWSER	02/29/00	Product family	METRAL	Spec ref *
FCJ		METRAL POWER HEADER		no. 89099	Rev. AS
		MOD, 5 ROW PRESS-FIT		CUSTOMER	sheet 2 of 6
catalog no					

PDM: Rev:AS STATUS:Released⁴ Printed: Aug 17, 2010

REV 7 - 8909-01-01



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1			2			3			4										
METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1					
		I	2			I	2			I	2			I	2				
89099-X01 SEE NOTE 10 LEAD FREE OPTION	E	P16	P16	89099-X05 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X11 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X15 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02				
	D	P16	P16		D	P01	P01		D	P02	P02		D	P04	P04				
	C	P16	P16		C	P02	P02		C	P01	P01		C	P05	P05				
	B	P16	P16		B	P03	P03		B	P01	P01		B	P06	P06				
	A	P16	P16		A	P03	P03		A	P01	P01		A	P05	P05				
89099-X02 SEE NOTE 10 LEAD FREE OPTION	E	P16	P16	89099-X06 SEE NOTE 10 LEAD FREE OPTION	E	P17	P17	89099-X12 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X16 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X20 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P16	P16		D	P17	P17		D	P01	P01		D	P04	P04		D	P04	P04
	C	P16	P16		C	P17	P17		C	P01	P01		C	P02	P02		C	P04	P04
	B	P16	P16		B	P17	P17		B	P03	P03		B	P02	P02		B	P04	P04
	A	P01	P01		A	P17	P17		A	P01	P01		A	P03	P03		A	P04	P04
89099-X03 SEE NOTE 10 LEAD FREE OPTION	E	P17	P17	89099-X07 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02	89099-X13 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X17 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X21 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P01	P01		D	P02	P02		D	P01	P01		D	P04	P04		D	P04	P04
	C	P17	P17		C	P02	P02		C	P02	P02		C	P01	P01		C	P04	P04
	B	P17	P17		B	P02	P02		B	P03	P03		B	P01	P01		B	P06	P06
	A	P01	P01		A	P02	P02		A	P03	P03		A	P03	P03		A	P04	P04
89099-X04 SEE NOTE 10 LEAD FREE OPTION	E	P17	P17	89099-X10 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X14 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03	89099-X18 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01	89099-X23 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P17	P17		D	P01	P01		D	P03	P03		D	P01	P01		D	P04	P04
	C	P17	P17		C	P02	P02		C	P03	P03		C	P03	P03		C	P05	P05
	B	P02	P02		B	P03	P03		B	P03	P03		B	P03	P03		B	P06	P06
	A	P17	P17		A	P02	P02		A	P03	P03		A	P03	P03		A	P06	P06

www.fciconnect.com		surface 3.200	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	T. BRUNGARD	11/19/99	ANGULAR	0.x	±0.3
Eng	M. STRAWSER	11/19/99	LINEAR	0.xx	±0.13
Chr	M. STRAWSER	11/19/99	0° ±2°	0.xxx	±0.051
Appr	M. STRAWSER	02/29/00	Product family	METRAL	Spec ref
			METRAL POWER HEADER		Rev. AS
			1 MOD, 5 ROW PRESS-FIT		89099
catalog no			CUSTOMER		sheet 3 of 6



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METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1		METRAL P/N	ROW	CONTACT CODE MOD. 1											
		1	2			1	2			1	2			1	2	1	2								
89099-X24 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06	89099-X28 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04	89099-X33 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X37 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X41 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01						
	D	P06	P06		D	P04	P04		D	P07	P07		D	P07	P07		D	P03	P03	D	P03	P03			
	C	P06	P06		C	P06	P06		C	P08	P08		C	P07	P07		C	P07	P07	C	P03	P03	C	P03	P03
	B	P06	P06		B	P06	P06		B	P09	P09		B	P07	P07		B	P07	P07	B	P03	P03	B	P03	P03
	A	P06	P06		A	P06	P06		A	P09	P09		A	P09	P09		A	P09	P09	A	P02	P02	A	P02	P02
89099-X25 SEE NOTE 10 LEAD FREE OPTION	E	P05	P05	89099-X30 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X34 SEE NOTE 10 LEAD FREE OPTION	E	P09	P09	89099-X38 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X42 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01						
	D	P05	P05		D	P07	P07		D	P09	P09		D	P07	P07		D	P02	P02	D	P02	P02			
	C	P05	P05		C	P08	P08		C	P09	P09		C	P09	P09		C	P02	P02	C	P02	P02			
	B	P05	P05		B	P09	P09		B	P09	P09		B	P09	P09		B	P02	P02	B	P02	P02			
	A	P05	P05		A	P08	P08		A	P09	P09		A	P09	P09		A	P01	P01	A	P01	P01			
89099-X26 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04	89099-X31 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X35 SEE NOTE 10 LEAD FREE OPTION	E	P08	P08	89099-X39 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03	89099-X43 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03						
	D	P04	P04		D	P07	P07		D	P08	P08		D	P01	P01		D	P03	P03	D	P03	P03			
	C	P05	P05		C	P07	P07		C	P08	P08		C	P01	P01		C	P03	P03	C	P03	P03			
	B	P05	P05		B	P07	P07		B	P08	P08		B	P01	P01		B	P02	P02	B	P02	P02			
	A	P06	P06		A	P07	P07		A	P08	P08		A	P01	P01		A	P02	P02	A	P02	P02			
89099-X27 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04	89099-X32 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X36 SEE NOTE 10 LEAD FREE OPTION	E	P07	P07	89099-X40 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02	89099-X44 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03						
	D	P04	P04		D	P07	P07		D	P07	P07		D	P01	P01		D	P03	P03	D	P03	P03			
	C	P04	P04		C	P07	P07		C	P08	P08		C	P02	P02		C	P03	P03	C	P03	P03			
	B	P04	P04		B	P09	P09		B	P08	P08		B	P01	P01		B	P16	P16	B	P16	P16			
	A	P06	P06		A	P07	P07		A	P09	P09		A	P02	P02		A	P03	P03	A	P03	P03			

www.fciconnect.com		surface 3.200	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	T. BRUNGARD	11/19/99	ANGULAR	LINEAR	Scale 11:10
Eng	M. STRAWSER	11/19/99	0.x	±0.3	size A4
Chr	M. STRAWSER	11/19/99	0.xx	±0.13	ECN *
Appr	M. STRAWSER	02/29/00	0.xxx	±0.051	
		Product family		METRAL	Spec ref
		METRAL POWER HEADER		89099	Rev. AS
		1 MOD, 5 ROW PRESS-FIT		CUSTOMER	sheet 4 of 6
		catalog no			



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METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X45 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P02	P02
	C	P17	P17
	B	P17	P17
	A	P17	P17

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X46 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P03	P03
	C	P01	P01
	B	P03	P03
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X47 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P01	P01
	C	P02	P02
	B	P03	P03
	A	P02	P02

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X48 SEE NOTE 10 LEAD FREE OPTION	E	P04	P04
	D	P04	P04
	C	P06	P06
	B	P04	P04
	A	P04	P04

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		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. 1	
		1	2
89099-X49 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02
	D	P03	P03
	C	P03	P03
	B	P03	P03
	A	P02	P02

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X50 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P01	P01
	C	P03	P03
	B	P01	P01
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X51 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P01	P01
	C	P16	P16
	B	P01	P01
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X52 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P02	P02
	C	P03	P03
	B	P03	P03
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X53 SEE NOTE 10 LEAD FREE OPTION	E	P05	P05
	D	P05	P05
	C	P06	P06
	B	P04	P04
	A	P04	P04

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X54 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02
	D	P02	P02
	C	P03	P03
	B	P01	P01
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X55 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02
	D	P02	P02
	C	P02	P02
	B	P03	P03
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X56 SEE NOTE 10 LEAD FREE OPTION	E	P05	P05
	D	P05	P05
	C	P05	P05
	B	P05	P05
	A	P04	P04

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X57 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P01	P01
	C	P01	P01
	B	P01	P01
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X58 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P03	P03
	C	P01	P01
	B	P03	P03
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X59 SEE NOTE 10 LEAD FREE OPTION	E	P16	P16
	D	P03	P03
	C	P03	P03
	B	P03	P03
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X60 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P01	P01
	C	P03	P03
	B	P03	P03
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X61 SEE NOTE 10 LEAD FREE OPTION	E	P03	P03
	D	P03	P03
	C	P02	P02
	B	P01	P01
	A	P01	P01

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X62 SEE NOTE 10 LEAD FREE OPTION	E	P06	P06
	D	P05	P05
	C	P05	P05
	B	P06	P06
	A	P05	P05

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X63 SEE NOTE 10 LEAD FREE OPTION	E	P01	P01
	D	P02	P02
	C	P01	P01
	B	P02	P02
	A	P03	P03

METRAL P/N	ROW	CONTACT CODE MOD. 1	
		1	2
89099-X64 SEE NOTE 10 LEAD FREE OPTION	E	P02	P02
	D	P02	P02
	C	P01	P01
	B	P03	P03
	A	P01	P01

www.fciconnect.com		surfaces 3.200	tolerance std	projection	mm
		ISO 1302	ISO 406 ISO 1101		
TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	T. BRUNGARD	11/19/99	ANGULAR	0.x	±0.3
Eng	M. STRAWSER	11/19/99	LINEAR	0.xx	±0.13
Chr	M. STRAWSER	11/19/99	0° ±2°	0.xxx	±0.051
Appr	M. STRAWSER	02/29/00	Product family	METRAL	Spec ref
			METRAL POWER HEADER		Rev.
1 MOD, 5 ROW PRESS-FIT			89099		AS
catalog no			CUSTOMER		sheet 5 of 6

PDM: Rev:AS

STATUS:Released

4 Printed: Aug 17, 2010

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

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

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

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



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 -XYX IS SnPb 89099-XYXLF 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-XXXXP OR XXXXX-XXXXPLF
- 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, INFRARED OR VAPOR PHASE REFLOW OVEN.

www.fciconnect.com		surface 3.200	tolerance std ISO 1302	ISO 406	ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	T. BRUNGARD	11/19/99	ANGULAR	LINEAR	0.x	±0.3	size A4 Scale 1:10
Eng	M. STRAWSER	11/19/99	0°	±2°	0.xx	±0.13	ECN *
Chr	M. STRAWSER	11/19/99	Product family		0.xxx	±0.051	Spec ref *
Appr	M. STRAWSER	02/29/00	Product family		METRAL		Spec ref *
		METRAL POWER HEADER			no. Eng	89099	
		I MOD, 5 ROW PRESS-FIT			Rev.	AS	
catalog no					CUSTOMER		sheet 6 of 6

REV 7 - 2000-04-17