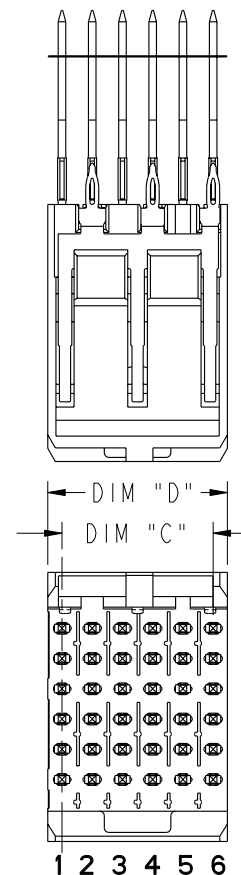
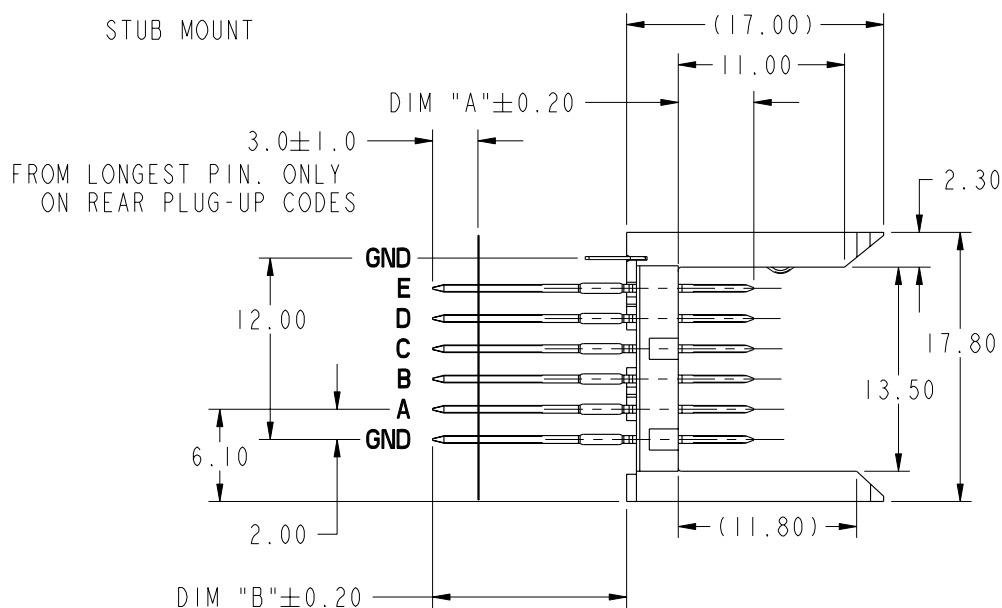
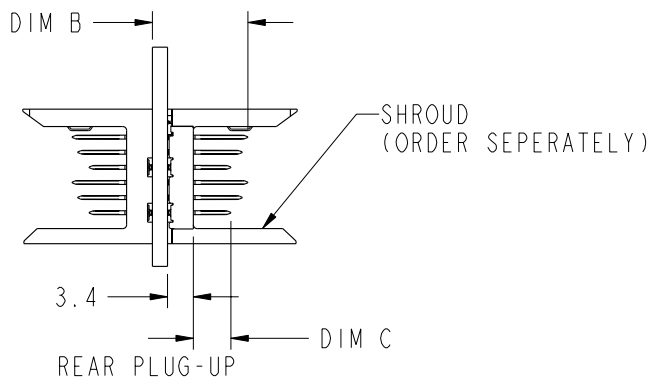
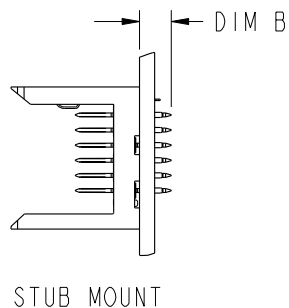

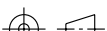




PRODUCT NUMBER	DIM C	DIM D
84817-X01ZZZ	10.00	11.88
84817-X02ZZZ	22.00	23.88
84817-X03ZZZ	34.00	35.88
84817-X04ZZZ	46.00	47.88



PRODUCT NUMBER	DIM C	DIM D
84817-X01ZZZLF	10.00	11.88
84817-X02ZZZLF	22.00	23.88
84817-X03ZZZLF	34.00	35.88
84817-X04ZZZLF	46.00	47.88

mat'l code				--		tolerances unless otherwise specified		CUSTOMER				www.fciconnect.com	
ltr	ecn no.	dr	date	linear	.XX ±.01		COPY			title			
AC	V06-0569	DCH	2006-06-12		.XXX ±.005		projection			HEADER ASS'Y			
AD	V07-0047	HTB	2007-01-19		.XXXX ±.0020		projection			STR. P.F. STD. 5-ROW			
-	-	-	-	angles	0° ±2°		MM		product family		METRAL 1000		
X	V04-0399	DAI	05/24/04	dr	K.BELL	3/29/00	MM		size		dwg no		
Y	V04-0758	DAI	07/23/04	engr	M.HAHN	3/29/00	scale		A		213		
AA	V05-0735	TAB	08/05/05	chr	M.HAHN	3/29/00	1:1		A		84817		
AB	V05-0806	VS	09/13/05	appd	M.HAHN	3/29/00					1 of 8		
sheet index	revision	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	
	sheet	1	2	3	4	5	6	7	8				



INFORMATION FOR MATING WITH 73981 & 84688 METRAL 1000 RECEPTACLES										
PIN CODES										
		DIM B								
		4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
DIM A	5.00	1*	22	30	5	35	48	40	65	9
	5.75	2*	44	31	6	36	49	25	66	10
	6.50	3*	45	32	7	37	50	41	24	11
	7.25	4*	46	33	8	38	51	42	67	12
	8.00	19*	47	34	20	39	52	43	68	21
RESTRICTION ON CURCUIT BOARD THICKNESS RANGE FOR PIN POSITIONS A, B, C, D & E										
		DIM B								
		4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS		1.60	2.95	2.95	2.95	3.05	3.80	4.30	5.00	5.70
MAX THICKNESS		NONE	3.80	4.55	5.30	6.05	6.80	7.30	8.00	8.70
RESTRICTION ON CURCUIT BOARD THICKNESS RANGE FOR PIN POSITION 'GND' **										
		DIM B								
		4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS		1.60	2.95	3.25	4.00	4.75	5.50	6.00	6.70	7.40
MAX THICKNESS		NONE	4.20	4.95	5.70	6.45	7.20	7.70	8.40	9.10

* 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.

SEE NOTE 18 LEAD FREE OPTION	CIRCUIT BOARD THICKNESS RANGE FOR REAR PLUG-UP CODES	
PRODUCT NUMBER	MIN	MAX
84817-XY002	2.95mm	3.80mm
84817-XY024	4.00mm	5.30mm
84817-XY025	*2.30-2.95mm	5.30mm
84817-XY026	*2.95mm	3.80mm
84817-XY030	*2.95mm	5.30mm
84817-XY031	*2.30-5.30mm	7.30mm
84817-XY032	2.95mm	3.80mm
84817-XY033	3.25mm	4.95mm
84817-XY036	*2.30-2.95mm	3.80mm
84817-XY038	5.50mm	6.80mm
84817-XY039	4.00mm	5.70mm

* NOT A STANDARD METRAL 1000 REAR
 PLUG-UP APPLICATION.

mat'l code				tolerances unless otherwise specified		CUSTOMER		www.fciconnect.com				
ltr	ecr no.	dr	date	linear	.XX ±.01		projection					
AD	-	-	-		.XXX ±.005							
					.XXXX ±.0020							
				angles	0° ±2°							
				dr	K.BELL	3/29/00	MM		product family		METRAL 1000	code
				enrg	M. HAHN	3/29/00			size		dwg no	213
				chr	M. HAHN	3/29/00	scale		A		84817	sheet
				appd	M. HAHN	3/29/00	1:1					2
sheet index		revision sheet										



1 | 2

**INFORMATION FOR MATING WITH
52057 METRAL 4000 RECEPTACLES**

PIN CODES

		DIM B								
		4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
		1*	22	30	5	35	48	40	65	9
DIM A	5.00	1*	22	30	5	35	48	40	65	9
	5.75	2*	44	31	6	36	49	25	66	10
	6.50	3*	45	32	7	37	50	41	24	11
	7.25	4*	46	33	8	38	51	42	67	12
	8.00	19*	47	34	20	39	52	43	68	21

**RESTRICTION ON CURCUIT BOARD THICKNESS RANGE
FOR PIN POSITIONS A, B, D & E**

	DIM B								
	4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS	1.60	2.95	2.95	3.30	4.05	4.80	5.30	6.00	6.70
MAX THICKNESS	NONE	3.80	4.55	5.30	6.05	6.80	7.30	8.00	8.70

**RESTRICTION ON CURCUIT BOARD THICKNESS RANGE
FOR PIN POSITION C**

	DIM B								
	4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS	1.60	2.95	2.95	2.95	3.05	3.80	4.30	5.00	5.70
MAX THICKNESS	NONE	3.80	4.55	5.30	6.05	6.80	7.30	8.00	8.70

**RESTRICTION ON CURCUIT BOARD THICKNESS RANGE
FOR PIN POSITION 'GND' ****

	DIM B								
	4.30	12.20	12.95	13.70	14.45	15.20	15.70	16.40	17.10
MIN THICKNESS	1.60	2.95	3.25	4.00	4.75	5.50	6.00	6.70	7.40
MAX THICKNESS	NONE	4.20	4.95	5.70	6.45	7.20	7.70	8.40	9.10

* 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.

3 |

SEE NOTE 18
LEAD FREE OPTION

4

CIRCUIT BOARD THICKNESS RANGE
FOR REAR PLUG-UP CODES

PRODUCT NUMBER	MIN	MAX
84817-XY002	2.95mm	3.80mm
84817-XY024	4.00mm	5.30mm
84817-XY025	*2.30-3.30mm	5.30mm
84817-XY026	*2.95mm	3.80mm
84817-XY030	*3.30mm	5.30mm
84817-XY031	*2.30-5.30mm	7.30mm
84817-XY032	2.95mm	3.80mm
84817-XY033	3.30mm	4.95mm
84817-XY036	*2.30-2.95mm	3.80mm
84817-XY038	5.50mm	6.80mm
84817-XY039	4.05mm	5.70mm

* NOT A STANDARD METRAL 1000 REAR
PLUG-UP APPLICATION.

mat'l code				--		tolerances unless otherwise specified		CUSTOMER		FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	.XX ±.01		COPY		title		
AD	-	-	-		.XXX ±.005		projection		HEADER ASS'Y		
					.XXXX ±.0020		MM		STR. P.F. STD. 5-ROW		
				angles	0° ±2°		MM		product family		
				dr	K. BELL	3/29/00	scale		METRAL 1000		
				engr	M. HAHN	3/29/00	1:1		code		
				chr	M. HAHN	3/29/00			213		
				appd	M. HAHN	3/29/00			sheet		
sheet index		revision sheet								A	
										84817	
										3	
										cage code	
										22526	
										4	

Pro/E

PDM: Rev:AD

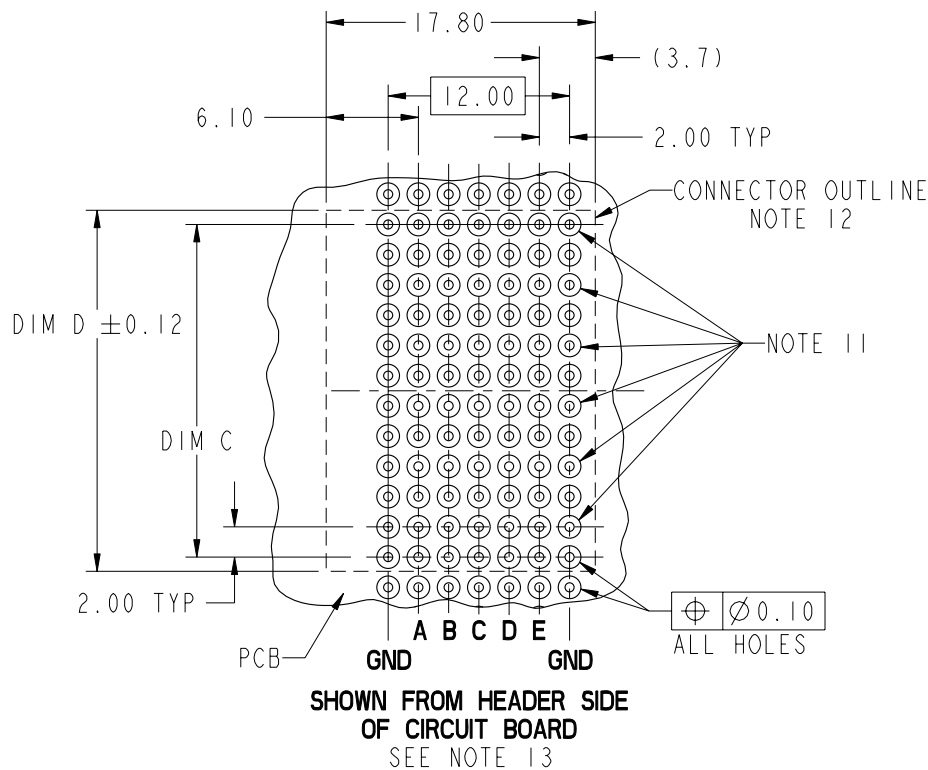
STATUS:Released

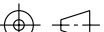
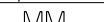
Printed: Feb 06, 2007



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

SEE PRINT 58315 FOR ADDITIONAL
 PCB INFORMATION



mat'l code				--		tolerances unless otherwise specified		CUSTOMER		FCi www.fciconnect.com		
ltr	ecn no.	dr	date	linear	.XX ±.01		COPY			title HEADER ASS'Y STR. P.F. STD. 5-ROW		
AD	-	-	-		.XXX ±.005		projection					
					.XXXX ±.0020							
				angles	0° ±2°							
		dr			K. BELL	3/29/00			product family		METRAL 1000	code
		engr			M. HAHN	3/29/00			size	dwg no	213	
		chr			M. HAHN	3/29/00			scale	84817		sheet
		appd			M. HAHN	3/29/00	1:1		A			
sheet index	revision sheet											

cage code 22526

Pro/E

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY001 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	
	B	
	A	
	GND	
84817-XY002 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	
	B	
	A	
	GND	
84817-XY011 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	1
84817-XY021 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	
84817-XY022 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	

SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY023 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	4
	B	
	A	2
	GND	
84817-XY024 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	8
	B	
	A	6
	GND	
84817-XY025 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	
	B	
	A	
	GND	1
84817-XY026 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	
	B	
	A	
	GND	1

*REAR PLUG-UP CODES

SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY027 *RPU SEE NOTE 18 LEAD FREE OPTION	E	44
	D	
	C	
	B	
	A	
	GND	
84817-XY028 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	3
	B	
	A	1
	GND	
84817-XY029 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	3
	B	2
	A	
	GND	1
84817-XY030 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	7
	B	6
	A	
	GND	1

mat'l code				tolerances unless otherwise specified		CUSTOMER		www.fciconnect.com			
ltr	ecn no.	dr	date	linear	.XX ±.01	COPY		title			
AD	-	-	-		.XXX ±.005	projection		HEADER ASS'Y			
					.XXX ±.0020			STR. P.F. STD. 5-ROW			
				angles	0° ±2°			product family		METRAL 1000	code
				dr	K.BELL 3/29/00	scale		size	dwg no	213	sheet
				engr	M. HAHN 3/29/00	1:1		A	84817	5	
				chr	M. HAHN 3/29/00						
				appd	M. HAHN 3/29/00						
sheet	revision										
index	sheet										

cage code 22526

Pro/E

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY031 *RPU SEE NOTE 18 LEAD FREE OPTION	E	25
	D	
	C	2
	B	25
	A	
	GND	2
84817-XY032 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	45
	B	22
	A	
	GND	
84817-XY033 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	
	B	
	A	
	GND	30
84817-XY034 SEE NOTE 18 LEAD FREE OPTION	E	3
	D	
	C	
	B	
	A	
	GND	2
84817-XY035 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	-
	B	
	A	
	GND	1

NOTES:

- SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
- SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
- SEE FCI PUBLICATION 950511-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 1994
- HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, 30% GLASS FILLED, FLAME RETARDANT PER UL 94-V0.
- PIN MATERIAL: PHOSPHER BRONZE
- GROUND SPRING MATERIAL: PHOSPHER BRONZE
- PLATING INFORMATION: SEE TABLE
- 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
- THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLAINT SECTIONS OF THE GROUND SPRING OF THE HEADER DIRECTLY OPOSE THE GROUND SPRING OF THE SHROUD. THE MIN PCB THICKNESS FOR FRONT PLUG-UP ONLY APPLICATIONS IS 1.6mm.
- THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
- THE 'CONNECTOR OUTLINE' IS THE MIN OUTLINE REQUIRED. TO DETERMINE THE OUTLINE NECESSARY TO PERMIT THE VARIOUS TYPES OF REPAIR OPERATIONS, SEE APPLICATION SPECIFICATION GES-20-010.
- CURRENT RATING : 1 AMP PER PIN
- TEMPERATURE RANGE : -55°C TO +105°C
- P/N 84817-X YY ZZZ

⑪ THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.

⑫ THE 'CONNECTOR OUTLINE' IS THE MIN OUTLINE REQUIRED. TO DETERMINE THE OUTLINE NECESSARY TO PERMIT THE VARIOUS TYPES OF REPAIR OPERATIONS, SEE APPLICATION SPECIFICATION GES-20-010.

13. CURRENT RATING : 1 AMP PER PIN

14. TEMPERATURE RANGE : -55°C TO +105°C

15. P/N 84817-X YY ZZZ

PIN POSITIONS
NUMBER MODULES
PLATING CODE

16. P/N 84817-X01ZZZ SHOWN.

mat'l code				tolerances unless otherwise specified		CUSTOMER		FCI			
ltr	ecr no.	dr	date	linear	.XX ±.01	projection	COPY	www.fciconnect.com			
AD	-	-	-		.XXX ±.005			title			
					.XXXX ±.0020			HEADER ASS'Y			
				angles	0° ±2°	MM	scale	STR. P.F. STD. 5-ROW			
				dr	K.BELL 3/29/00			product family METRAL 1000			
				enrg	M. HAHN 3/29/00			code			
				chr	M. HAHN 3/29/00	1:1	A	size			
				appd	M. HAHN 3/29/00			dwg no			
sheet	revision							84817			
index	sheet							213			
								sheet			
								6			

Pro/E

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY036 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	
	B	1
	A	
	GND	22
SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY037 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	
	B	
	A	
	GND	2
SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY038 *RPU SEE NOTE 18 LEAD FREE OPTION	E	49
	D	
	C	
	B	
	A	
	GND	

SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XY039 *RPU SEE NOTE 18 LEAD FREE OPTION	E	36
	D	
	C	
	B	
	A	
	GND	6

NOTES CONTINUED

17. THE PRODUCTS WHERE THE PART NUMBERS ENDS IN LF MEET 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

18. FOR LEAD FREE PART NUMBERS ADD 'LF' SUFFIX. EXAMPLE: 84817-XY038LF

mat'l code				tolerances unless otherwise specified		CUSTOMER		FCJ			
ltr	ecr no.	dr	date	linear	.XX ±.01	COPY		www.fcjconnect.com			
AD	-	-	-		.XXX ±.005	projection		title			
					.XXX ±.0020			STR. P.F. STD. 5-ROW			
				angles	0° ±2°			product family			
				dr	K. BELL 3/29/00	MM		METRAL 1000			
				enr	M. HAHN 3/29/00			code			
				chr	M. HAHN 3/29/00	scale		213			
				appd	M. HAHN 3/29/00	1:1		sheet			
sheet	revision							A			
index	sheet							7			

cage code 22526

Pro/E

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



PRODUCT NUMBER	PIN CONTACT AREAS TO RECEPTACLE	PRESS FIT PIN TO PCB	GROUND SPRING CONTACT FINGERS	GROUND SPRING EON PRESS FIT TO PCB	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
84817-1ZZZ	0.8um Au OVER Ni	SnPb OVER Ni	0.8um Au OVER Ni	SnPb OVER Ni	84818-104
84817-2ZZZ	2.0um Au OVER Ni	SnPb OVER Ni	1.3um Au OVER Ni	SnPb OVER Ni	84818-304
84817-3ZZZ	1.3um Au OVER Ni	SnPb OVER Ni	1.3um Au OVER Ni	SnPb OVER Ni	84818-304
84817-5ZZZ	1.3um GXT OVER Ni	SnPb OVER Ni	1.3um GXT OVER Ni	SnPb OVER Ni	84818-504
84817-9ZZZ	0.8um GXT OVER Ni	SnPb OVER Ni	0.8um Au OVER Ni	SnPb OVER Ni	84818-104
84817-AZZZ	0.8um Au OVER Ni	0.08um Au OVER Ni	0.8um Au OVER Ni	SnPb OVER Ni	84818-104
84817-1ZZZLF	0.8um Au OVER Ni	Sn OVER Ni	0.8um Au OVER Ni	Sn OVER Ni	84818-104LF
84817-2ZZZLF	2.0um Au OVER Ni	Sn OVER Ni	1.3um Au OVER Ni	Sn OVER Ni	84818-304LF
84817-3ZZZLF	1.3um Au OVER Ni	Sn OVER Ni	1.3um Au OVER Ni	Sn OVER Ni	84818-304LF
84817-5ZZZLF	1.3um GXT OVER Ni	Sn OVER Ni	1.3um GXT OVER Ni	Sn OVER Ni	84818-504LF
84817-9ZZZLF	0.8um GXT OVER Ni	Sn OVER Ni	0.8um Au OVER Ni	Sn OVER Ni	84818-104LF
84817-AZZZLF	0.8um Au OVER Ni	0.08um Au OVER Ni	0.8um Au OVER Ni	Sn OVER Ni	84818-104LF

mat'l code				tolerances unless otherwise specified		CUSTOMER		FCI www.fciconnect.com	
ltr	ecn no.	dr	date	linear	.XX ±.01		COPY		projection
AD	-	-	-		.XXX ±.005				
					.XXXX ±.0020				
				angles	0° ±2°				
				dr	K.BELL	3/29/00	MM 		product family
				engr	M. HAHN	3/29/00	scale		METRAL 1000
				chr	M. HAHN	3/29/00	1:1		code
				appd	M. HAHN	3/29/00	A		213
sheet	revision								sheet
index	sheet								8

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[FCI / Amphenol:](#)

[84817-201022LF](#)