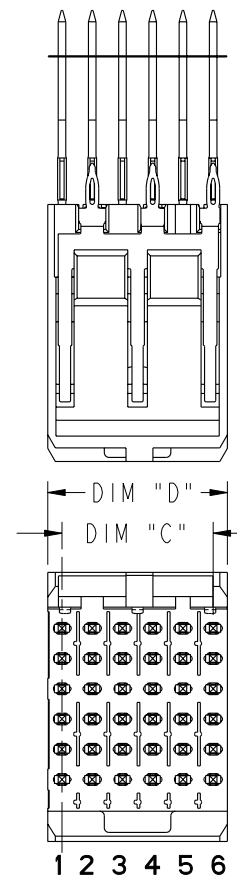
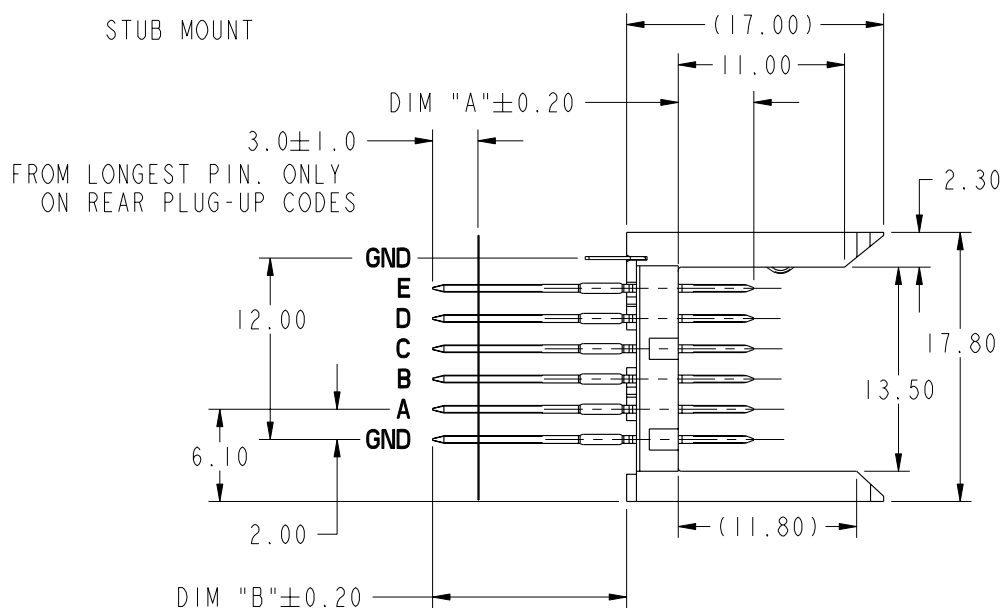
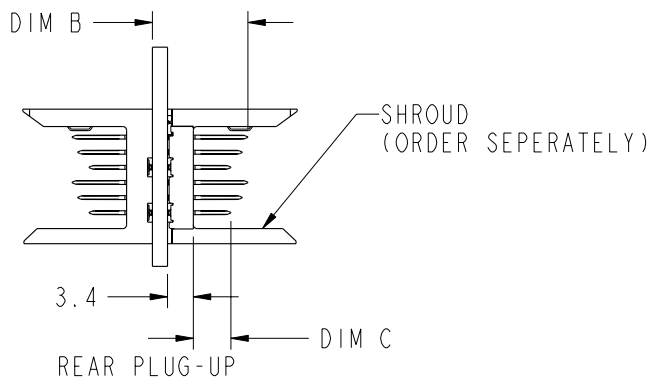
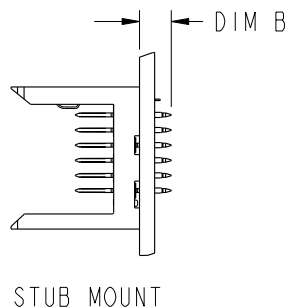

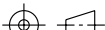
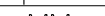




PRODUCT NUMBER	DIM C	DIM D
84817-X01ZZZ	10.00	11.88
84817-X02ZZZ	22.00	23.88
84817-X03ZZZ	34.00	35.88
84817-X04ZZZ	46.00	47.88



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				projection 	title HEADER ASS'Y STR. P.F. STD. 5-ROW			
AC	V06-0569	DCH	2006-06-12		.XXX ±.005								
AD	V07-0047	HTB	2007-01-19		.XXXX ±.0020								
-	-	-	-		angles 0° ±2°								
X	V04-0399	DAI	05/24/04	dr	K.BELL	3/29/00			scale 1:1	product family		METRAL 1000	code
Y	V04-0758	DAI	07/23/04	engr	M. HAHN	3/29/00				size		dwg no	213
AA	V05-0735	TAB	08/05/05	chr	M. HAHN	3/29/00				A		84817	sheet
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			
		sheet		1	2	3	4	5	6	7	8		

Pro/E

cage code 22526

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



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

cage code 22526

Pro/E

PDM: Rev:AD

STATUS:Released

Printed: Feb 06, 2007



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		www.fciconnect.com	
ltr	ecn no.	dr	date	linear	.XX ±.01		COPY		title		
AD	-	-	-		.XXX ±.005		projection		HEADER ASS'Y		
					.XXXX ±.0020				STR. P.F. STD. 5-ROW		
				angles	0° ±2°				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							3		
									A		

Pro/E

cage code 22526

PDM: Rev:AD

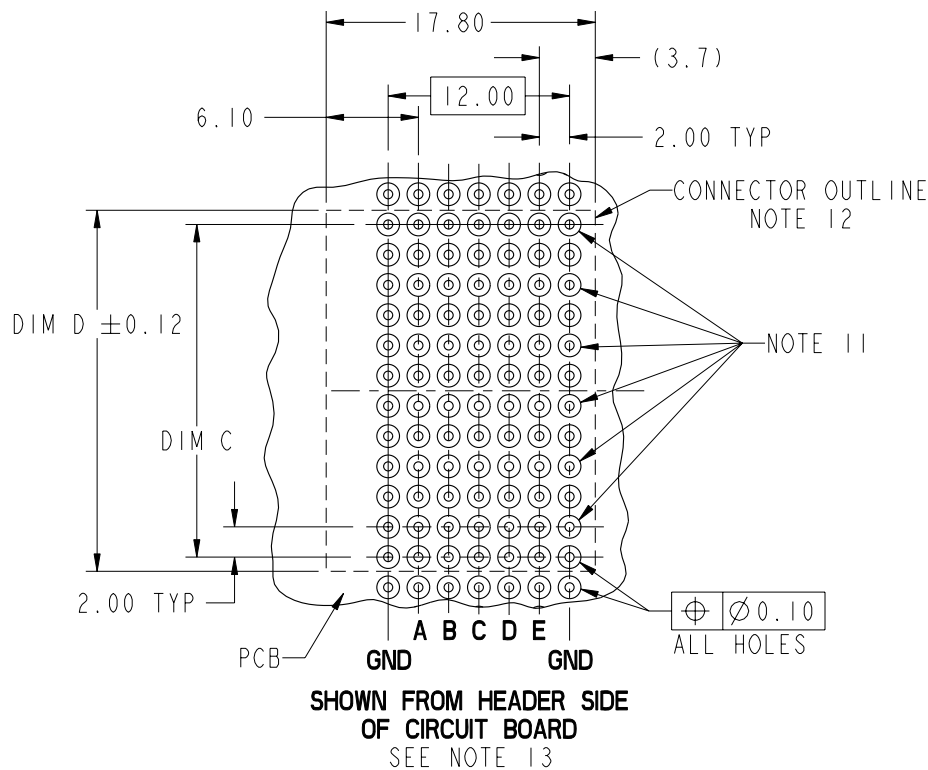
STATUS:Released


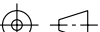
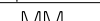
Printed: Feb 06, 2007



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



SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XXX001 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	
	B	
	A	
	GND	
84817-XXX002 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	
	B	
	A	
	GND	
84817-XXX011 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	
84817-XXX021 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	
84817-XXX022 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	
	B	
	A	
	GND	

SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XXX023 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	4
	B	
	A	2
	GND	
84817-XXX024 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	8
	B	
	A	6
	GND	
84817-XXX025 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	
	B	
	A	
	GND	
84817-XXX026 *RPU SEE NOTE 18 LEAD FREE OPTION	E	22
	D	
	C	
	B	
	A	
	GND	

\*REAR PLUG-UP CODES

SIGNAL PIN TABLES		
PRODUCT #	ROW	PIN CODES
84817-XXX027 *RPU SEE NOTE 18 LEAD FREE OPTION	E	44
	D	
	C	
	B	
	A	
	GND	
84817-XXX028 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	3
	B	
	A	1
	GND	
84817-XXX029 SEE NOTE 18 LEAD FREE OPTION	E	2
	D	
	C	3
	B	
	A	2
	GND	
84817-XXX030 *RPU SEE NOTE 18 LEAD FREE OPTION	E	6
	D	
	C	7
	B	
	A	6
	GND	

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		
					.XXX ±.0020				
				angles	0° ±2°				
				dr	K. BELL	3/29/00	MM		product family
				enrg	M. HAHN	3/29/00			METRAL 1000
				chr	M. HAHN	3/29/00	scale		code
				appd	M. HAHN	3/29/00	1:1		213
sheet index		revision sheet						size	
								dwg no	
								A	
								84817	
								sheet	
								5	
								cage code	
								22526	
								4	



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	30
	GND	
84817-XY034 SEE NOTE 18 LEAD FREE OPTION	E	3
	D	
	C	
	B	
	A	2
	GND	
84817-XY035 SEE NOTE 18 LEAD FREE OPTION	E	1
	D	
	C	-
	B	
	A	1
	GND	

#### 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

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	 1:1	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	A	size	dwg no			
				appd	M. HAHN 3/29/00			84817			
sheet	revision							213			
index	sheet							sheet			
								6			



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		FCi			
ltr	ecr no.	dr	date	linear	.XX ±.01	COPY		www.fciconnect.com			
AD	-	-	-		.XXX ±.005	projection		title			
					.XXX ±.0020	angles		STR. P.F. STD. 5-ROW			
					0° ±2°	MM		product family			
				dr	K. BELL	3/29/00	scale	size		dwg no	
				enrg	M. HAHN	3/29/00		A		84817	
				chr	M. HAHN	3/29/00				213	
				appd	M. HAHN	3/29/00				sheet	
sheet	revision										
index	sheet										



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
				enrg	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

Pro/E				3				cage code				22526				4			
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