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Part Number: **0878054009**
Status: **Active**
Overview: extreme_powerplus_ssi
Description: 5.08mm (.200") Pitch Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ P(A)-S-P(B) Header, Through Hole, Right Angle, 20 Circuits, Power Alpha 2, Signal 16, Power Beta 2; Recessed Signal Pin at B3, ScrewMount, Lead-free

Documents:

[3D Model](#) [Product Specification PS-87805-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

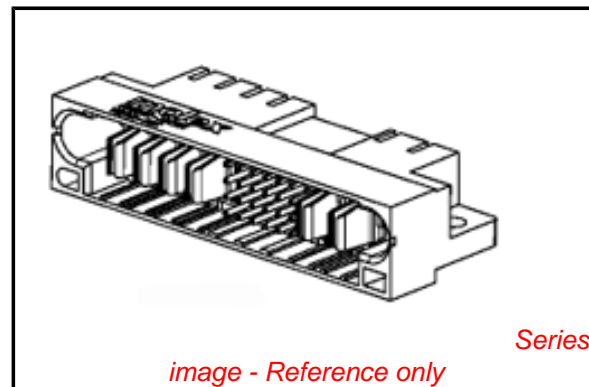
CSA LR19980

General

Product Family PCB Headers
 Series 87805
 Application Board-to-Board
 Comments Recessed Signal Pin Location at: B3
 Overview extreme_powerplus_ssi
 Product Name EXTreme PowerPlus™

Physical

Breakaway No
 Circuits (Loaded) 20
 Circuits Detail Power Alpha 2, Signal 16, Power Beta 2
 Color - Resin Black
 Durability (mating cycles max) 100
 First Mate / Last Break Yes
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 4
 Orientation Right Angle
 PC Tail Length (in) 0.135 In
 PC Tail Length (mm) 3.43 mm
 PCB Locator No
 PCB Retention Yes
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.100 In, 0.200 In
 Pitch - Mating Interface (mm) 2.54 mm, 5.08 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 100
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Yes
 Polarized to PCB Yes
 Shrouded Fully
 Stackable No
 Temperature Range - Operating -20°C to +105°C
 Termination Interface: Style Through Hole



EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status
Not Reviewed

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
 87805Series

Electrical

Current - Maximum per Contact 2.5A, 30A
Voltage - Maximum 250V (RMS)

Solder Process Data

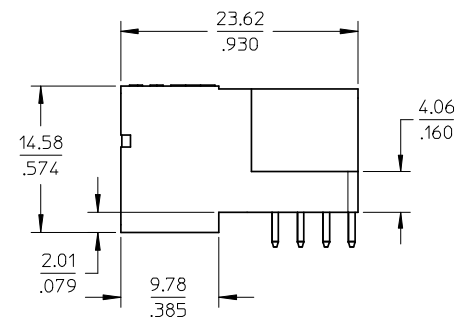
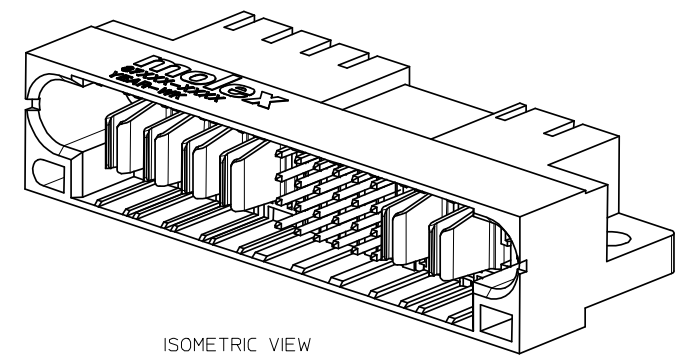
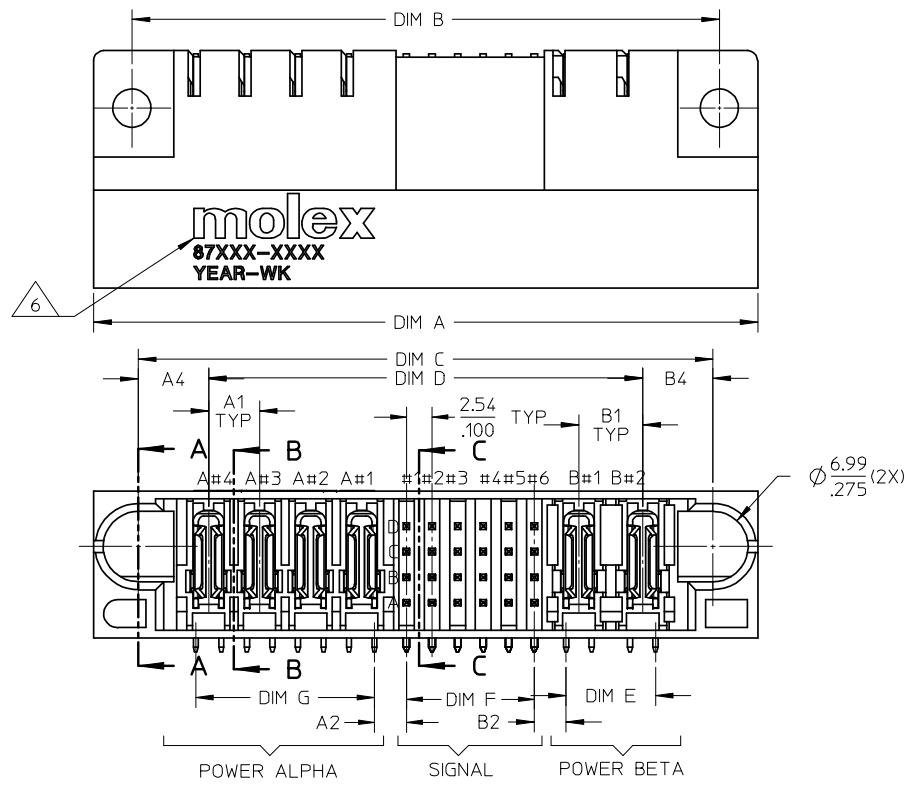
Duration at Max. Process Temperature (seconds) 10
Lead-free Process Capability SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature 3
Process Temperature max. C 260

Material Info**Reference - Drawing Numbers**

Application Specification AS-87631-018
Product Specification PS-87805-006
Sales Drawing SD-87805-010

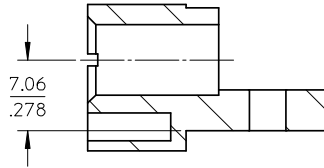
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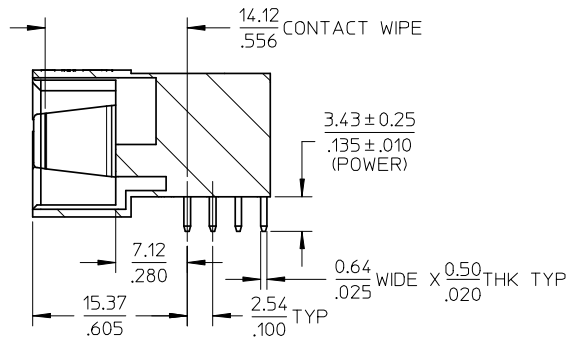


- NOTES:
1. MATERIALS: HOUSING - LCP, GLASS FILLED, UL94V-0, COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
 2. FINISHES: POWER & SIGNAL PINS:
SELECTIVE GOLD IN CONTACT AREA.
THICKNESS= 0.76 MICROMETER/ 30 MICROINCH MINIMUM
SELECTIVE TIN ALLOY IN THE PC TAIL AREA
THICKNESS= 2.54 MICROMETER/100 MICROINCH MINIMUM WITH
1.27 μ m MINIMUM NICKEL UNDERPLATE OVERALL.
 3. PRODUCT SPECIFICATION: PS-87805-006.
 4. SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
 - 5 COMPONENT STAY AWAY ZONE FROM CONNECTOR.
 - 6 MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
 - 7 PCB NOTE FOR DIAMETER 1.02/.040 PLATED HOLE.
 - DRILLED HOLE SIZE IS 1.151/.0453.
 - PLATED WITH 0.007/.0003 MINIMUM TIN OVER 0.03/.001 TO 0.08/.003 COPPER PLATING TO ACHIEVE 1.02 \pm 0.08/.040 \pm .003 HOLE.
 8. 4P ALPHA- 24 SIGNAL-2P BETA CONFIGURATION IS SHOWN FOR ILLUSTRATION.

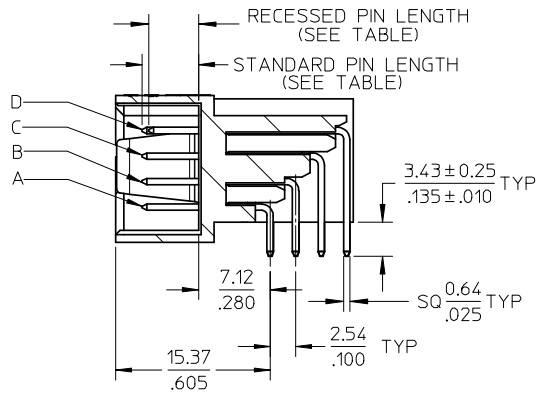
PDR#S-001793-00-00 EC NO: S2008-0944 DRWN:SKANG 2008/05/06 CHKD:ATSEE 2008/05/07 APPR:MLONG 2008/05/07	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\blacktriangledown = 0$ $\triangle = 0$		MM/IN	NTS	METRIC		
REV	DESCRIPTION	4 PLACES \pm --- \pm ---	DRAWN BY	DATE	TITLE		
D2		3 PLACES \pm --- \pm .010	BHLOW	2003/05/27	POWER CONNECTOR HEADER		
		2 PLACES \pm 0.25 \pm ---	CHECKED BY	DATE	P(A)-S-P(B) CONFIG.		
		1 PLACE \pm --- \pm ---	PTL IM	2003/06/11	R/A, T/H, .200 VERSION		
		ANGULAR \pm 3 °	APPROVED BY	DATE	MOLEX INCORPORATED		
			SKTOH	2003/06/13	MATERIAL NO. DOCUMENT NO. SHEET NO.		
					SEE TABLE SD-87805-010 1 OF 3		
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



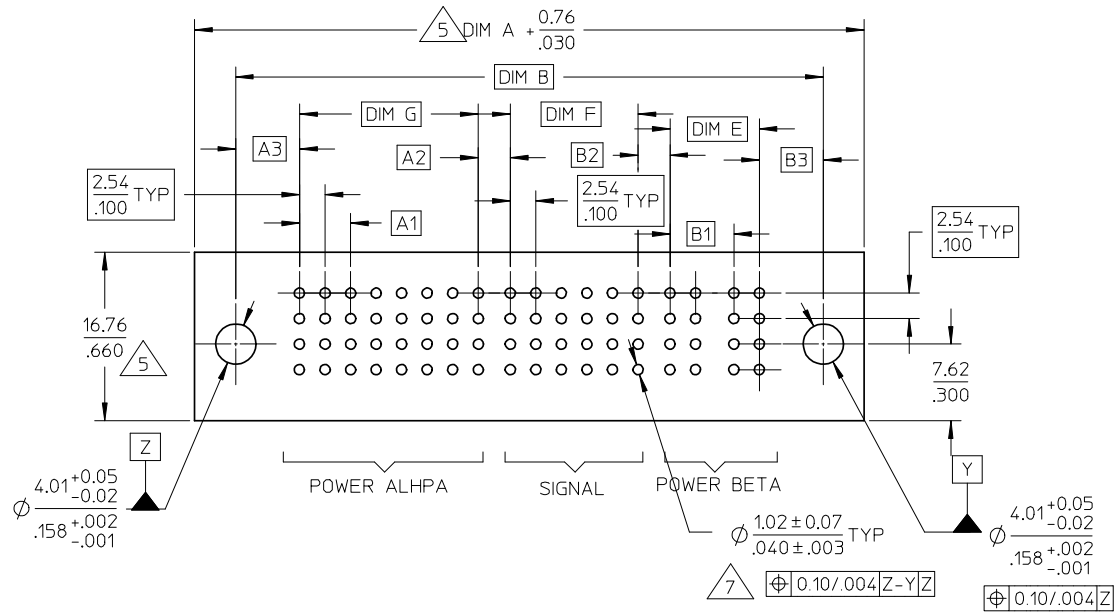
SECTION A-A



SECTION B-B



SECTION C-C



PDR#S-001793-00-00 EC NO: S2008-0944 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2008/05/06 2008/05/07 2008/05/07	QUALITY SYMBOLS ▽=0 □=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM/IN DRAWN BY DATE BHLW 2003/05/27 CHECKED BY DATE PTLIM 2003/06/11 APPROVED BY DATE SKTOH 2003/06/13 MATERIAL NO. SEE TABLE	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, .200 VERSION MOLEX INCORPORATED DOCUMENT NO. SD-87805-010	SHEET NO. 2 OF 3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	D2	REV				

PART NUMBER	P-S-P CONFIGURATION			8		7		6		5		4		3		2		1				
	POWER ALHPA	SIGNAL	POWER BETA	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN		POWER ALHPA				POWER BETA				PACKAGING
												LENGTH	LOCATION	A1	A2	A3	A4	B1	B2	B3	B4	
87805-4001	4	24	2	66.04 2.600	58.42 2.300	57.15 2.250	43.18 1.700	8.89 .350	12.70 .500	17.78 .700	6.86/.270	5.59/.220	A6, B3	5.08	3.18	6.35	6.98	6.35	3.18	6.35	6.98	TRAY
87805-4002	4	28	4	77.47 3.050	69.85 2.750	68.58 2.700	54.61 2.150	17.78 .700	15.24 .600	17.78 .700	6.86/.270	5.59/.220	B4	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY
87805-4007	3	20	3	62.33 2.450	54.61 2.150	53.34 2.100	39.37 1.550	12.70 .500	10.16 .400	12.70 .500	6.86/.270	NIL	NIL	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY
87805-4008	2	24	2	54.61 2.150	47.00 1.850	45.72 18.00	31.76 1.250	7.62 .300	12.70 .500	7.62 .300	6.86/.270	5.59/.220	A1,A2,B1, B2,D1,D2	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY
87805-4009	2	16	2	49.53 1.950	41.91 1.650	40.64 1.600	26.68 1.050	7.62 .300	7.62 .300	7.62 .300	6.86/.270	5.59/.220	B3	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY
87805-4010	4	24	4	74.93 2.950	67.31 2.650	66.04 2.600	52.08 2.050	17.78 .700	12.70 .500	17.78 .700	6.86/.270	5.59/.220	A1,C1,C2, D1,D2,D6	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY
87805-4012	3	20	10	104.14 4.100	96.52 3.800	95.25 3.750	80.65 3.175	48.26 1.900	10.16 .400	17.78 .700	6.86/.270	5.59/.220	A1	7.62	3.81	6.98	7.62	5.08	3.18	6.35	6.98	TRAY
87805-4014	4	12	4	67.31 2.650	59.69 2.350	58.42 2.300	44.46 1.750	17.78 .700	5.08 .200	17.78 .700	6.86/.270	5.59/.220	C2	5.08	3.18	6.35	6.98	5.08	3.18	6.35	6.98	TRAY



PDR#S-001793-00-00 EC NO: S2008-0944 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2008/05/06 2008/05/07 2008/05/07	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION					
						MM/IN		NTS	METRIC						
						mm	INCH	DRAWN BY		DATE		TITLE			
								BHLW		2003/05/27		POWER CONNECTOR HEADER P(A)-S-P(B) CONFIG. R/A, T/H, .200 VERSION			
				4 PLACES		± --- ± ---		CHECKED BY		DATE		MOLEX INCORPORATED			
				3 PLACES		± --- ± .010		PTL IM		2003/06/11					
				2 PLACES		± 0.25 ± ---		APPROVED BY		DATE		SD-87805-010			
				1 PLACE		± --- ± ---		SKTOH		2003/06/13					
				ANGULAR ± 3 °				MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE						3 OF 3			
						SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
						A3									