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Part Number: [0878073001](#)
Status: **Active**
Overview: [extreme_powerplus_ssi](#)
Description: 5.08mm (.200") Pitch and Multi-Centers Power, 2.54mm (.100") Pitch Signal, EXTreme PowerPlus™ S-P(B) Header, Through Hole, Right Angle, Beveled Metal Pins, 62 Circuits, Signal 44, Power Beta 18, Recessed Signal Pins: NIL, 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 [87807](#)
 Application Board-to-Board
 Comments Recessed Signal Pins: NIL
 Overview [extreme_powerplus_ssi](#)
 Product Name EXTreme PowerPlus™

Physical

Breakaway No
 Circuits (Loaded) 34
 Circuits Detail Signal 44|Power Beta 18
 Color - Resin Black
 Durability (mating cycles max) 100
 First Mate / Last Break No
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Lock 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, 0.175 In, 0.200 In, 0.225 In, 0.250 In
 Pitch - Mating Interface (mm) 2.54 mm, 4.45 mm, 5.08 mm, 5.72 mm, 6.35 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 Closed Ends
 Stackable No
 Surface Mount Compatible (SMC) Yes

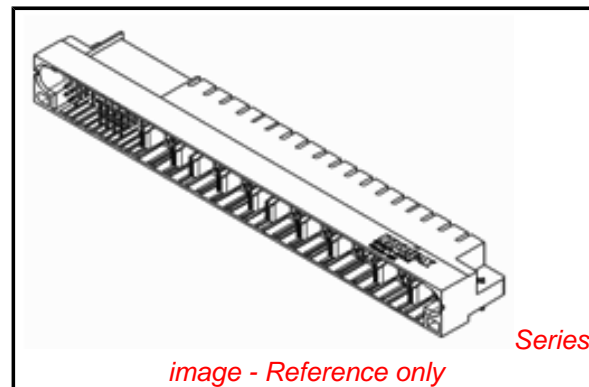


image - Reference only

EU RoHS

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

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

[87807Series](#)

Temperature Range - Operating -20°C to +105°C
Termination Interface: Style Through Hole

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-87807-002

This document was generated on 05/26/2010

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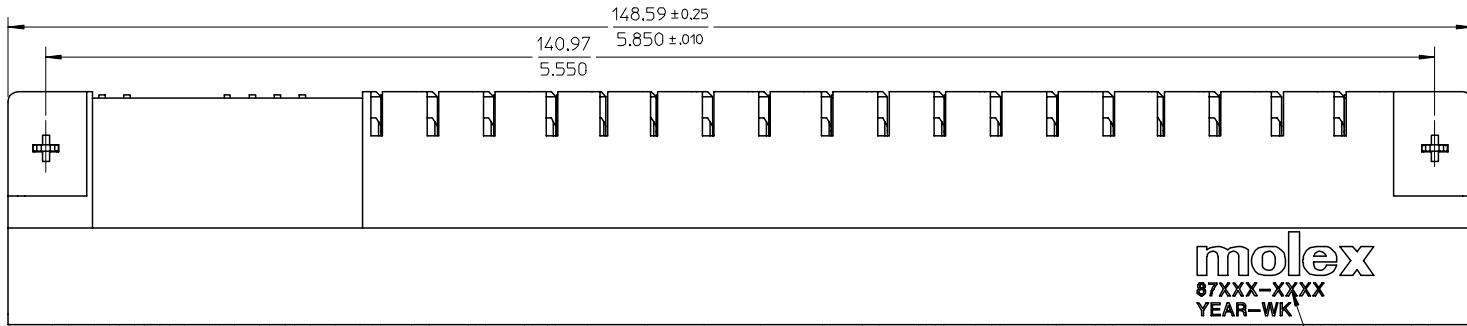
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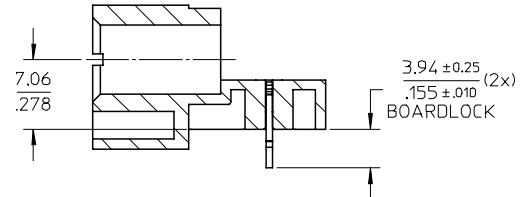
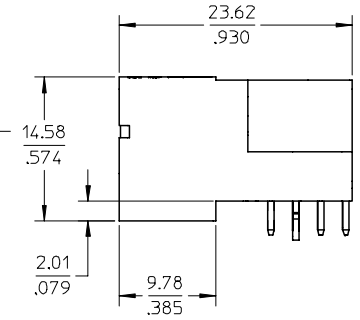
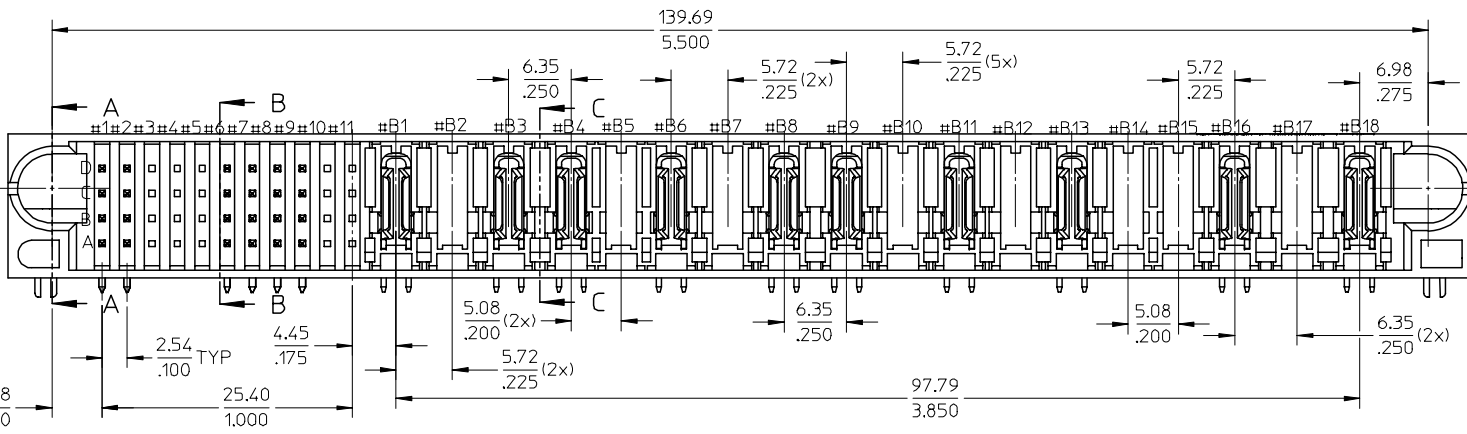
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A



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87XXX-XXXX
YEAR-WK

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SECTION A-A

OBS	TIN/LEAD P/N	2006/03/31
EC NO:	S2006-0807	2006/03/31
DRWN:	M:LONG	2006/03/31
CHKD:	CGOH	2006/04/03
APPR:	PTL:IM	2006/04/03
REV	DESCRIPTION	
B		

QUALITY SYMBOLS	▽=0
	▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± .010
2 PLACES	± 0.25 ± ---
1 PLACE	± --- ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

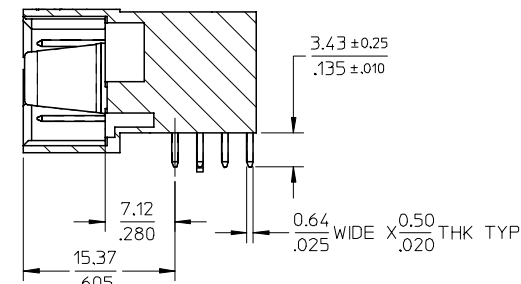
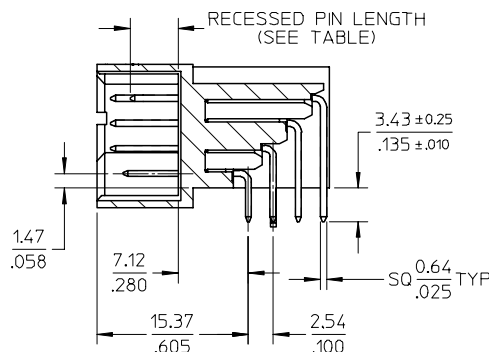
DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
BHLOW	2005/02/22
CHECKED BY	DATE
PTL IM	2005/05/06
APPROVED BY	DATE
SCLOW	2005/05/09
MATERIAL NO.	SEE TABLE
SIZE	A3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR HEADER		
S-P(B), MULTI CTRS		
5.08MM VER., R/A, T/H		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE	SD-87807-002	1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1
PART NUMBER	P-S-P CONFIGURATION		VOID POWER	VOID SIGNAL	STANDARD SIGNAL PIN LENGTH	RECESSED SIGNAL PIN		PACKAGING	BOARDLOCK OR SCREW MOUNT OPTION	
	SIGNAL	POWER BETA				LENGTH	LOCATION			
87807-3001	44	18	B2,B5,B7,B10, B12,B14,B15,B17	A3,A4,A5,A10,A11,B3,B4,B5,B10,B11 C3,C4,C5,C10,C11,D3,D4,D5,D10,D11	6.86/.270	5.59/.220	NIL	TRAY	BOARDLOCK	

PART NO		1	2	3	4	5	6	7	8	9	10	11	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	
87807-5001/3001			X	X	X						X	X	PL	X	PL	PL	X	PL	X	PL	PL	X	PL	X	PL	X	X	PL	X	PL	
44S + 18P																															



SECTION B-B

SECTION C-C

NOTES:

- MATERIALS: HOUSING - LCP, GLASS FILLED, UL94V-0, COLOUR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
BOARDLOCK - COPPER ALLOY
- 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
NICKEL OVERALL.
- PRODUCT SPECIFICATION: PS-87805-006.
- SEE SHEET 3 FOR RECOMMENDED PCB LAYOUT AND THICKNESS.
- COMPONENT STAY AWAY ZONE FROM CONNECTOR.
- MANUFACTURER LOGO, PART NUMBER AND YEAR-WEEK CODE.
- 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±0.08/.040±0.03 HOLE.

OBS TIN/LEAD P/N EC NO: S2006-0807 DRWN:MLONG CHKD:CGOH APPR:PTLIM	2006/03/31 2006/03/31 2006/04/03	QUALITY SYMBOLS ▽=0 ▽C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			mm	INCH	MM/IN	NTS	METRIC			
			4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE			
			3 PLACES ± ---	± .010	BHLOW	2005/02/22	POWER CONNECTOR HEADER			
2 PLACES ± 0.25	± ---	CHECKED BY	DATE	S-P(B), MULTI CTRS						
1 PLACE ± ---	± ---	PTLIM	2005/05/06	5.08MM VER., R/A, T/H						
ANGULAR ± 3 °		APPROVED BY	DATE	MOLEX INCORPORATED						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SCLOW	2005/05/09	SD-87807-002		SHEET NO. 2 OF 3				
		MATERIAL NO.	DOCUMENT NO.	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
		SIZE								

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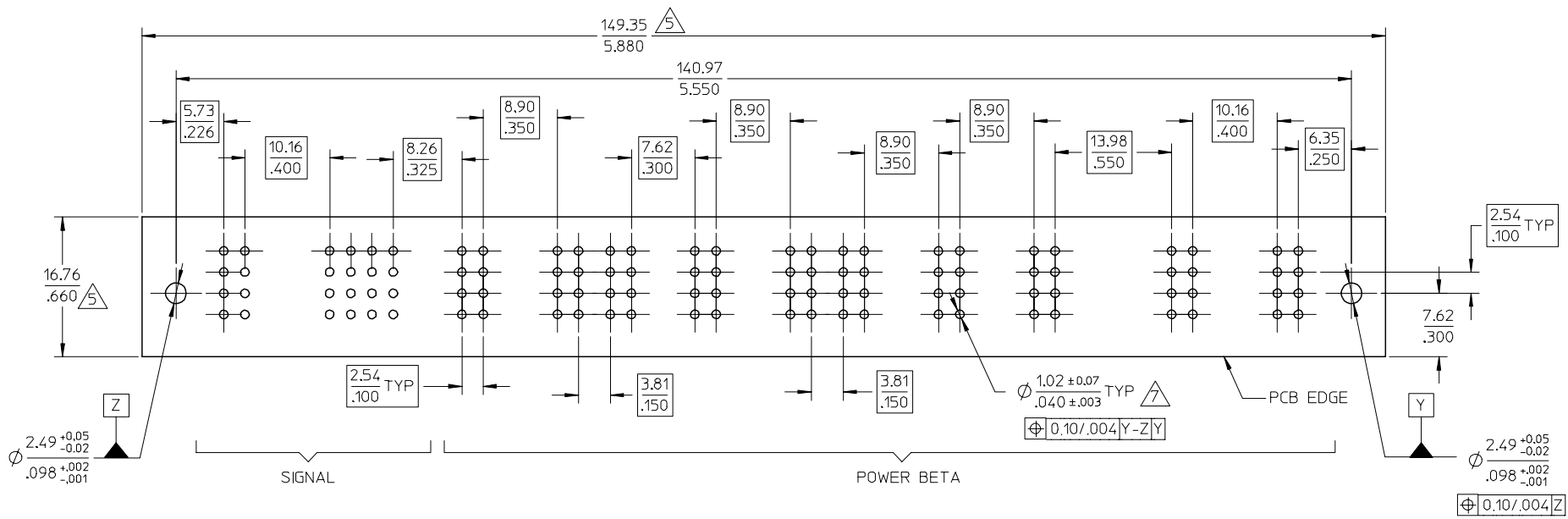
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D

C

B

A



$\phi 2.49^{+0.05}_{-0.02}$
 $.098^{+0.002}_{-.001}$

SIGNAL

POWER BETA

PCB EDGE

$\phi 1.02^{+0.07}_{-.040 \pm .003}$ TYP
 $\phi 0.10/.004 Y-Z Y$

2.54 TYP
.100

Y

$\phi 2.49^{+0.05}_{-0.02}$
 $.098^{+0.002}_{-.001}$

$\phi 0.10/.004 Z$

OBS TIN/LEAD P/N EC NO: S2006-0807 DRWN:MLONG CHKD:CGOH APPR:PTLIM	2006/03/31	DESCRIPTION REV
	2006/03/31	
	2006/04/03	

QUALITY SYMBOLS	$\nabla = 0$
	$\triangle = 0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM/IN
4 PLACES	$\pm .010$
3 PLACES	$\pm .010$
2 PLACES	± 0.25
1 PLACE	$\pm .010$
ANGULAR $\pm 3^\circ$	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
BHLOW	2005/02/22
CHECKED BY	DATE
PTLIM	2005/05/06
APPROVED BY	DATE
SCLOW	2005/05/09
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
POWER CONNECTOR HEADER		
S-P(B), MULTI CTRS		
5.08MM VER., R/A, T/H		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-87807-002		3 OF 3
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