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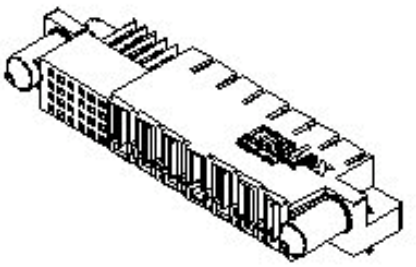
Part Number: 0877003005
Status: Active
Overview: extreme_powerplus_ssi
Description: 6.35mm (.250") Pitch, Power, 2.54mm (.100") Pitch, Signal, EXTreme PowerPlus™ Pa-S Receptacle, Through Hole, with Beveled Metal Pins, Right Angle, Signal 16, Power Alpha 4, 20 Circuits, Leadfree



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-87631-006 (PDF)
- RoHS Certificate of Compliance (PDF)

General

Product Family	PCB Receptacles
Series	87700
Application	Board-to-Board
Comments	No Recessed Power Circuit Position
Overview	extreme_powerplus_ssi
Product Literature Order No	987650-3002
Product Name	EXTreme PowerPlus™

Physical

Circuits (Loaded)	20
Circuits Detail	Signal 16, Power Alpha 4
Color - Resin	Black
Durability (mating cycles max)	100
Glow-Wire Compliant	No
Guide 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
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.100 In, 0.250 In
Pitch - Mating Interface (mm)	2.54 mm, 6.35 mm
Pitch - Term. Interface (in)	0.100 In, 0.125 In
Pitch - Term. Interface (mm)	2.54 mm, 3.18 mm
Plating min: Mating (µin)	30.4
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
Stackable	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Through Hole

Electrical

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

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
87700Series

Mates With
87696 EXTreme PowerPlus™ Pa-S Header

Current - Maximum per Contact	2.5A, 30A
Voltage - Maximum	250V DC

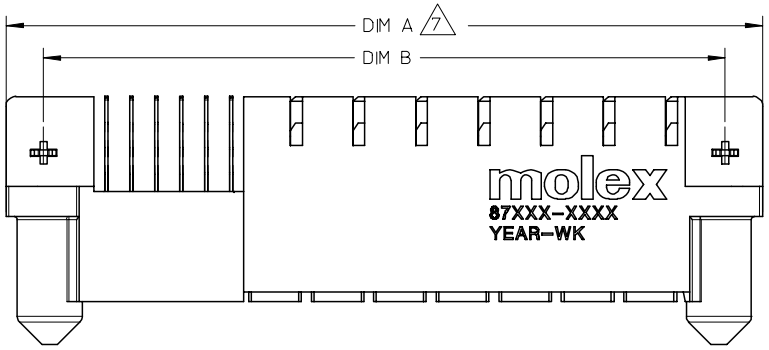
Solder Process Data

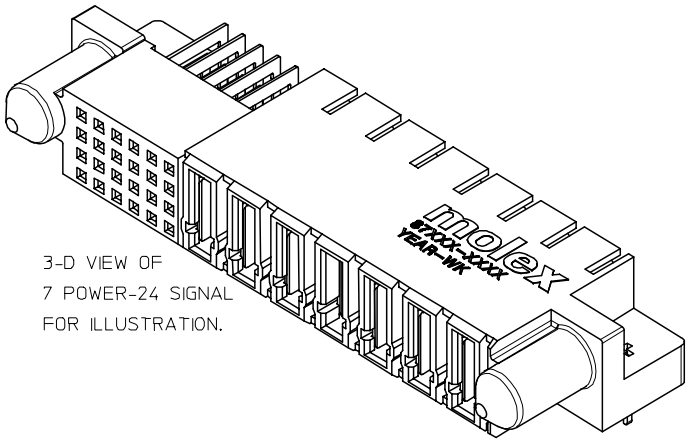
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

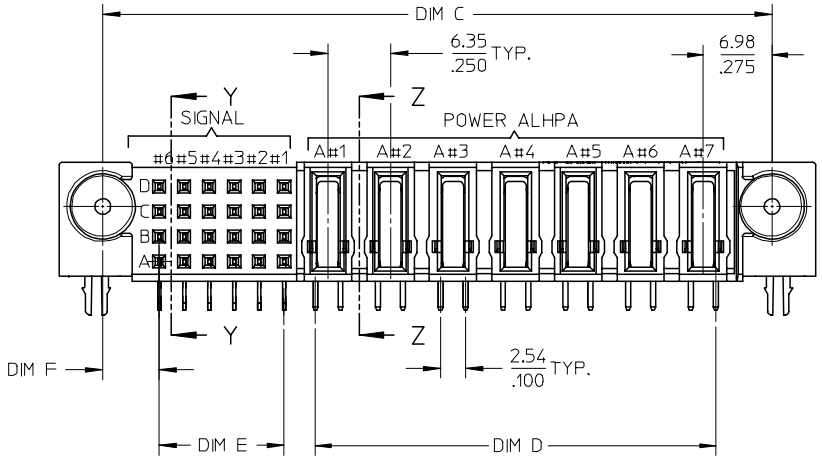
Reference - Drawing Numbers

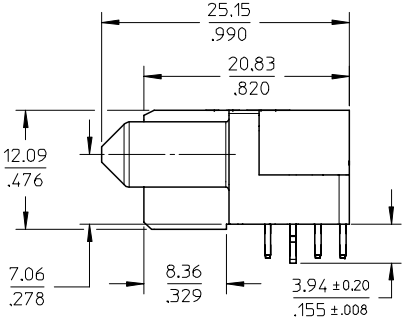
Application Specification	AS-87631-018
Product Specification	PS-87631-006
Sales Drawing	SD-87700-010

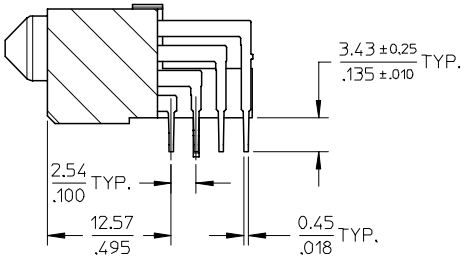




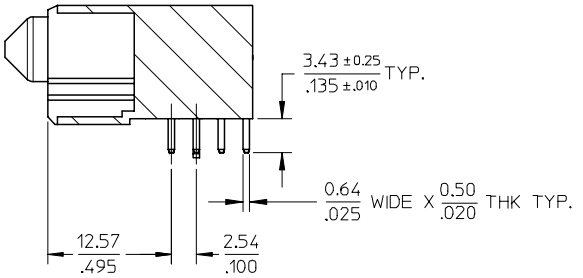
3-D VIEW OF
7 POWER-24 SIGNAL
FOR ILLUSTRATION.







SECTION Y-Y



SECTION Z-Z

PDR#S-001245-00-00
EC NO: S2006-1028
DRWN:KFLIM 2006/05/09
CHKD:MLONG 2006/05/09
APPR:PTLIM 2006/05/10
DESCRIPTION
REV D1

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

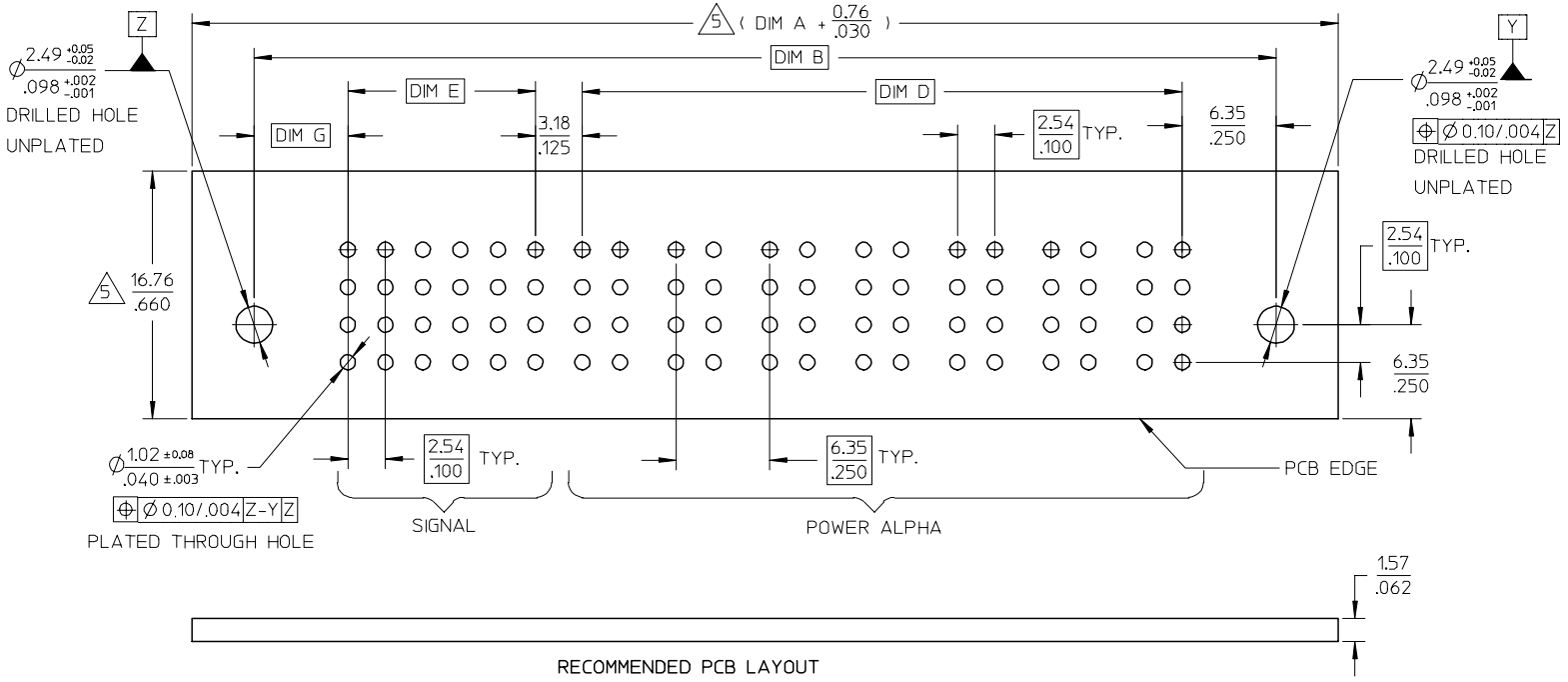
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM/IN
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	KMGOH
DATE	2002/08/20
CHECKED BY	PTLIM
DATE	2002/11/25
APPROVED BY	SKTOH
DATE	2002/11/26
MATERIAL NO.	SEE TABLE

TITLE
POWER CONNECTOR RECEPT.
P(A)-S CONFIGURATION
R/A, T/H, 6.35MM

molex MOLEX INCORPORATED

DOCUMENT NO. SD-87700-010
SHEET NO. 1 OF 3
SIZE A3



NOTES:

1 MATERIALS : HOUSING - LCP, GLASS FILLED,
UL 94V-0, COLOR: BLACK
POWER PINS - COPPER ALLOY
SIGNAL PINS - COPPER ALLOY
BOARD LOCK - COPPER ALLOY

2 FINISHES: POWER AD SIGNAL PINS
SELECTIVE GOLD IN THE CONTACT AREA
THICKNESS = 0.76 MICROMETER / 30 MICROINCH MINIMUM
SELECTIVE TIN IN THE PC TAIL AREA
THICKNESS = 2.54 MICROMETER / 100 MICROINCH MINIMUM
NICKEL OVERALL

3 PRODUCT SPECIFICATIONS : PS-87631-006

4 SEE SHEET 2 FOR RECOMMENDED PCB LAYOUT AND THICKNESS

5 COMPONENT STAY AWAY ZONE FROM CONNECTOR

6 REFER TO THE TABLE ON TOP OF PAGE 3/3 FOR RECESSED PINS LOCATION

7 7 POWER - 24 SIGNAL CONNECTOR IS SHOWN FOR ILLUSTRATION

PDR#S-001245-00-00
EC NO: S2006-1028
DRWN:KFLIM 2006/05/09
CHKD:MLONG 2006/05/09
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DESCRIPTION
REV D1

QUALITY SYMBOLS
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1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM/IN
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: KMGOH DATE: 2002/08/20
CHECKED BY: PTLIM DATE: 2002/11/25
APPROVED BY: SKTOH DATE: 2002/11/26

TITLE: POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, T/H, 6.35MM

molex MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87700-010
SHEET NO.: 2 OF 3
SIZE: A3

PART NUMBER	P-S CONFIGURATION		DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	RECESS POWER PINS LOCATIONS	VOID PIN LOCATION	PACKAGING
	SIGNAL	POWER ALPHA										
87700-3002	24	7	76.83 3.025	69.22 2.725	67.94 2.675	40.64 1.600	12.70 .500	5.72 .225	6.35 .250	NIL	NIL	TRAY
87700-3003	16	4	52.70 2.075	45.09 1.775	43.81 1.725	21.59 .850	7.62 .300	5.72 .225	6.35 .250	NIL	NIL	TRAY
87700-3005	16	4	52.07 2.050	44.45 1.750	43.18 1.700	21.59 .850	7.62 .300	5.08 .200	5.72 .225	NIL	NIL	TRAY
87700-3006	20	4	54.61 2.150	46.99 1.850	45.72 1.800	21.59 .850	10.16 0.400	5.08 .200	5.72 .225	NIL	A2,B2,C2,D2	TRAY

PDR#S-001245-00-00
EC NO: S2006-1028
DRWN:KFLIM 2006/05/09
CHKD:MLONG 2006/05/09
APPR:PTLIM 2006/05/10
DESCRIPTION
D1
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

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ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM/IN
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: KMGOH DATE: 2002/08/20
CHECKED BY: PTLIM DATE: 2002/11/25
APPROVED BY: SKTOH DATE: 2002/11/26

TITLE: POWER CONNECTOR RECEPT. P(A)-S CONFIGURATION R/A, T/H, 6.35MM

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87700-010
SHEET NO.: 3 OF 3
SIZE: A3