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Part Number: **0459120009**
Status: **Active**
Overview:
Description: 12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 3 Segments (Power, Signal, Signal Sequence), Press-Fit

Agency Certification

| | |
|-----|----------|
| CSA | LR19980 |
| TUV | 30482572 |
| UL | E29179 |

General

| | |
|----------------|----------------------|
| Product Family | Edge Card Connectors |
| Series | 45912 |
| Component Type | Edgecard to PCB |
| Overview | edge_card_connectors |
| Product Name | EXTreme PowerEdge™ |

Physical

| | |
|--------------------------------|---|
| Circuits (Loaded) | 18 |
| Circuits (maximum) | 18 |
| Circuits Detail | 2 Power, 8 Signal, 8 Signal |
| Color - Resin | Black |
| Durability (mating cycles max) | 250 |
| Entry Angle | Vertical (Top Entry) |
| Flammability | 94V-0 |
| Keying to Mating Part | N/A |
| Material - Metal | High Performance Alloy (HPA), Phosphor Bronze |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| PC Tail Length (in) | 0.177 In |
| PC Tail Length (mm) | 4.50 mm |
| PCB Thickness Recommended (in) | 0.093 In |
| PCB Thickness Recommended (mm) | 2.40 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.508 In |
| Pitch - Mating Interface (mm) | 12.90 mm |
| Plating min: Mating (µin) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 150 |
| Plating min: Termination (µm) | 3.75 |
| Temperature Range - Operating | -40°C to +105°C |
| Termination Interface: Style | Through Hole - Compliant Pin |

Electrical

| | |
|-------------------------------|---------|
| Current - Maximum per Contact | 3A, 40A |
| Voltage - Maximum | 250V |

Material Info

Reference - Drawing Numbers

| | |
|-------------------------|--------------|
| Packaging Specification | PK-45714-001 |
| Product Specification | PS-45719-001 |
| Sales Drawing | SD-45912-001 |

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Contains SVHC: No
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](#)

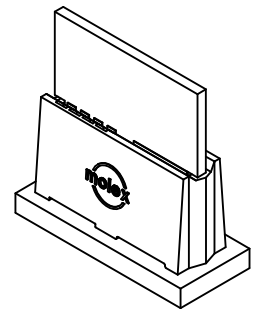
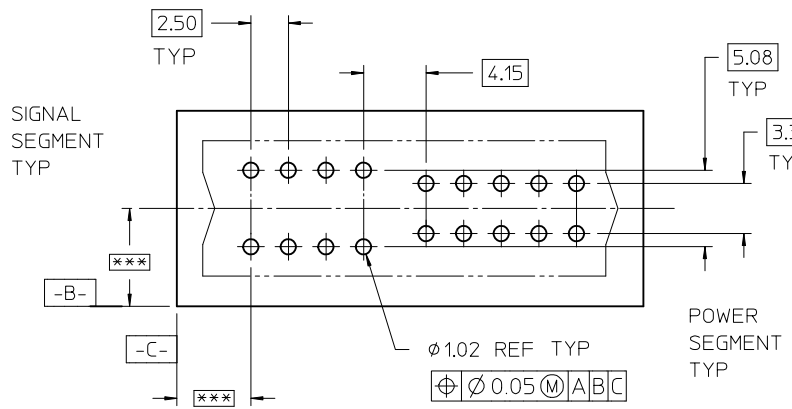
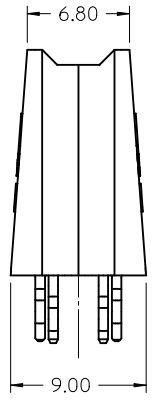
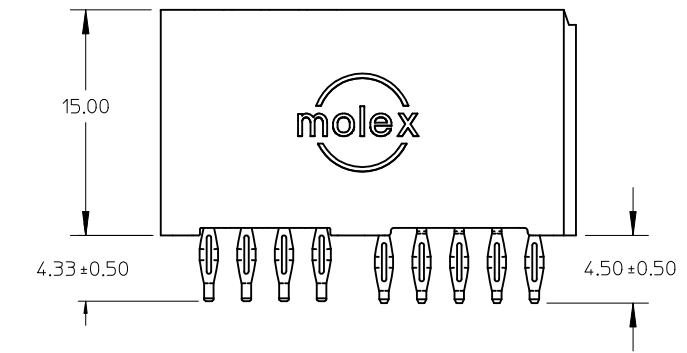
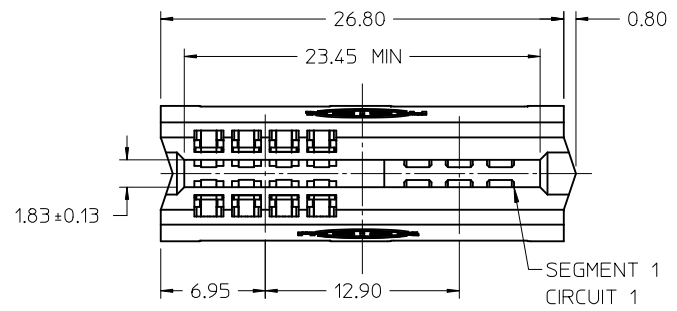
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Search Parts in this Series
 45912Series

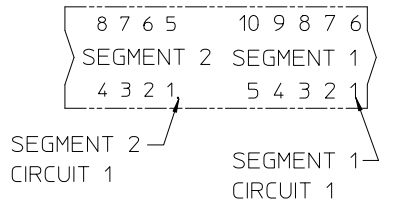
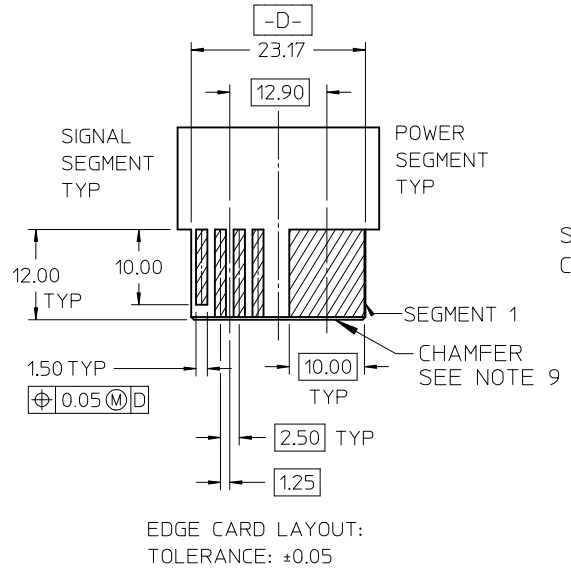
Mates With
 1.58mm (.062") double sided card edge

This document was generated on 06/04/2010

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- NOTES:
1. MATERIAL: HOUSING - LCP, UL94V-0, BLACK
MATERIAL: TERMINAL - COPPER ALLOY
 2. FINISH: SELECT GOLD: 30 M.I. MIN IN CONTACT AREA
SELECT TIN: 150 M.I. MIN IN PC TAIL AREA
BOTH OVER NICKEL: 50 M.I. MIN
 3. PRODUCT SPECIFICATION: PS-45719-001.
 4. PACKAGING SPECIFICATION: PK-45714-001.
 5. PCB THICKNESS: SEE CHART
 6. EDGE CARD THICKNESS: 1.57±0.15
 7. DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF THE TOTAL TOLERANCE.
 8. PCB HOLE SPECIFICATION: SEE PS-45719-001
 9. 0.50 X 45° CHAMFER ON LEADING EDGE, TYP 4 SIDES
 10. PART IS RoHS COMPLIANT. SEE ES-45482-999 FOR LABEL REQUIREMENTS.
 11. SEE SHEET 4 FOR OPTIONAL END LATCH VERSION.



| MATERIAL NUMBER | SEGMENT | SEGMENT |
|-----------------|---------|---------|
| 45912-0001 | SIGNAL | POWER |
| 45912-0002 | POWER | SIGNAL |
| SEE 45845 | SIGNAL | SIGNAL |
| SEE 45714 | POWER | POWER |

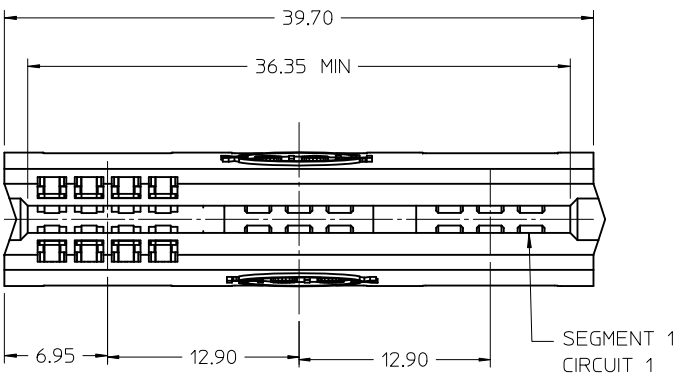
PCB LAYOUT: COMPONENT SIDE
*** = TO BE DETERMINED BY CUSTOMER

| | |
|---|---------------------------------------|
| DELETE SHT 4 EC NO: UCP2010-2087 DRWN: JSCHAFFER 2010/02/17 CHKD: SAMIEC 2010/03/24 APPR: APATEL 2010/03/25 | DESCRIPTION |
| | QUALITY SYMBOLS |
| | GENERAL TOLERANCES (UNLESS SPECIFIED) |
| | DIMENSION STYLE |
| | SCALE |

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

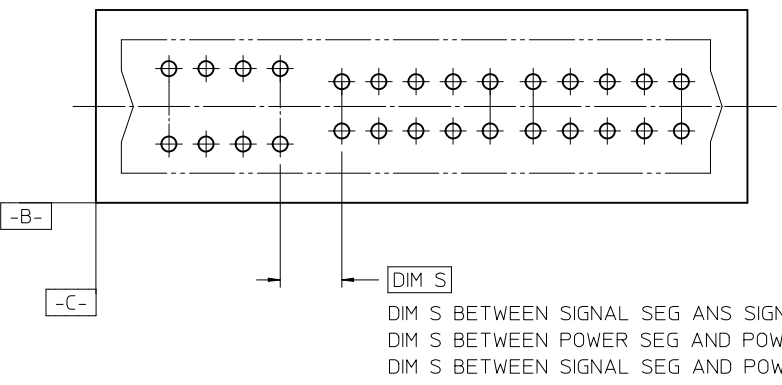
| DIMENSION STYLE | |
|-----------------|------------|
| MM ONLY | |
| DRAWN BY | DATE |
| SAMIEC | 2005/04/14 |
| CHECKED BY | DATE |
| SAMIEC | 2005/04/14 |
| APPROVED BY | DATE |
| MARGULIS | 2005/04/14 |
| MATERIAL NUMBER | SEE CHART |
| SIZE | A |

| SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|---|--------------|------------------------|
| 2:1 | METRIC | |
| TITLE | | |
| POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL CPI | | |
| Molex MOLEX INCORPORATED | | |
| MATERIAL NUMBER | DOCUMENT NO. | SHEET NO. |
| SEE CHART | SD-45912-001 | 1 OF 4 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |



NOTE:
 FINISH (FOR -1008 ONLY)
 NICKEL (MATING AREA) 50-150 M.I.
 Pd/Ni 100-200 M.I. IN MATING AREA
 GOLD FLASH IN MATING AREA
 TIN NICKEL (COMPLIANT OR TAIL AREA)
 30-60 M.I. NICKEL UNDER 15-60 M.I. TIN

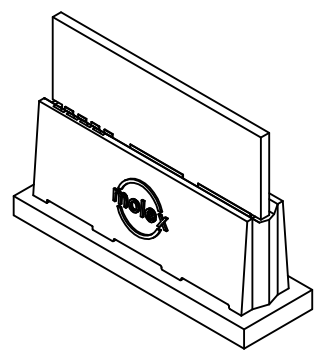
| SIGNAL SEGMENT | POWER SEGMENT | POWER SEGMENT |
|----------------|---------------|---------------|
| 8 7 6 5 | 10 9 8 7 6 | 10 9 8 7 6 |
| SEGMENT 3 | SEGMENT 2 | SEGMENT 1 |
| 4 3 2 1 | 5 4 3 2 1 | 5 4 3 2 1 |



PCB LAYOUT: COMPONENT SIDE

| MATERIAL NUMBER | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 | OPTIONAL VOID LOCATION |
|------------------------|-----------|-----------|-----------|------------------------|
| 45912-0007 | SIGNAL | POWER | POWER | |
| 45912-0008 | POWER | SIGNAL | POWER | |
| 45912-1008 SEE NOTE | POWER | SIGNAL | POWER | |
| 45912-1108 | POWER | SIGNAL | POWER | SIGNAL SEG PIN 3 |
| 45912-2108 | VOID | SIGNAL | POWER | SIGNAL SEG PIN 3 |
| 45912-0009 | SIGNAL | SIGNAL | POWER | |
| 45912-0010 | SIGNAL | POWER | SIGNAL | |
| 45912-0011 | POWER | SIGNAL | SIGNAL | |
| 45912-0012 | POWER | POWER | SIGNAL | |
| SEE 45845 | SIGNAL | SIGNAL | SIGNAL | |
| SEE 45714 | POWER | POWER | POWER | |

MATERIAL NUMBER: 45911-0007 SHOWN
 SEE SHEET ONE FOR OTHER NOTES AND DIMENSIONS



| | | | | | | | | | |
|---|---|---------------------------------------|--------|--|------------|------------------------------|---|-------------------------------------|--|
| EC NO: UCP2010-2087 DRWN: JSCHAFFER 2010/02/17 CHKD: SAMIEC 2010/03/24 APPR: APATEL 2010/03/25 | QUALITY SYMBOLS DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | 4 PLACES | ± --- | ± --- | DRAWN BY | DATE | TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL CPI | | |
| | | 3 PLACES | ± --- | ± --- | SAMIEC | 2005/04/14 | | | |
| | | 2 PLACES | ± 0.25 | ± --- | CHECKED BY | DATE | MOLEX INCORPORATED | | |
| | | 1 PLACE | ± 0.25 | ± --- | SAMIEC | 2005/04/14 | | | |
| ANGULAR ±1/2° | | APPROVED BY MARGULIS | | DATE 2005/04/14 | | MATERIAL NUMBER SEE CHART | | DOCUMENT NO. SD-45912-001 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SIZE A | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | SHEET NO. 2 OF 4 | | |

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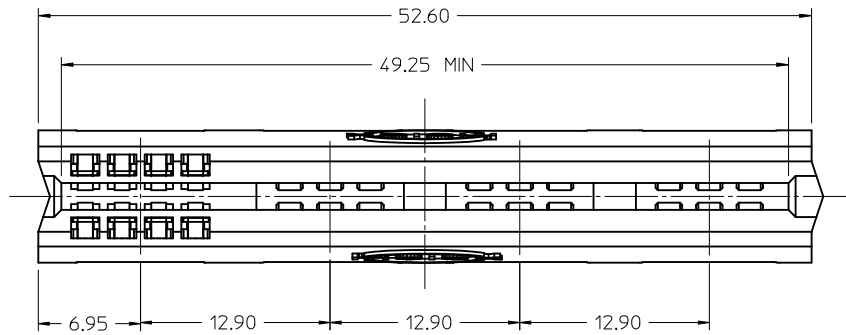
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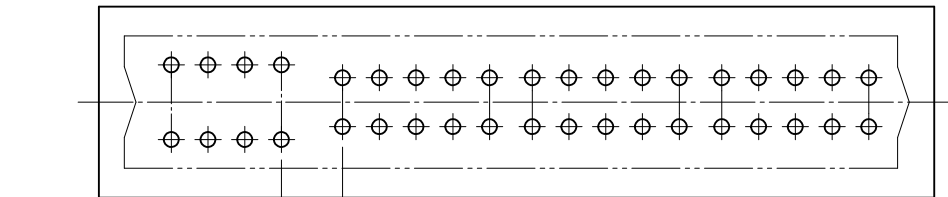
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MATERIAL NUMBER 45912-0025 SHOWN
SEE SHEET ONE FOR OTHER NOTES AND DIM.

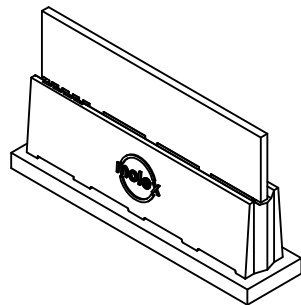
| | | | |
|-----------|------------|------------|------------|
| 8 7 6 5 | 10 9 8 7 6 | 10 9 8 7 6 | 10 9 8 7 6 |
| SEGMENT 4 | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 |
| 4 3 2 1 | 5 4 3 2 1 | 5 4 3 2 1 | 5 4 3 2 1 |

| MATERIAL NUMBER | SEGMENT 4 | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 |
|-----------------|-----------|-----------|-----------|-----------|
| 45912-0025 | SIGNAL | POWER | POWER | POWER |
| 45912-0026 | POWER | SIGNAL | POWER | POWER |
| 45912-0027 | SIGNAL | SIGNAL | POWER | POWER |
| 45912-0028 | SIGNAL | POWER | SIGNAL | POWER |
| 45912-0029 | POWER | SIGNAL | SIGNAL | POWER |
| 45912-0030 | POWER | POWER | SIGNAL | POWER |
| 45912-0031 | SIGNAL | SIGNAL | SIGNAL | POWER |
| 45912-0032 | SIGNAL | POWER | POWER | SIGNAL |
| 45912-0033 | POWER | SIGNAL | POWER | SIGNAL |
| 45912-0034 | SIGNAL | SIGNAL | POWER | SIGNAL |
| 45912-0035 | SIGNAL | POWER | SIGNAL | SIGNAL |
| 45912-0036 | POWER | SIGNAL | SIGNAL | SIGNAL |
| 45912-0037 | POWER | POWER | SIGNAL | SIGNAL |
| 45912-0038 | POWER | POWER | POWER | SIGNAL |



DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

PCB LAYOUT: COMPONENT SIDE



| | | | | | | | | |
|---|-----------------|---|-------------|-----------------------------------|---------------------------|---------------------|---|------------------------|
| EC NO: UCP2010-2087 DRWN: JSCHAFFER 2010/02/17 CHKD: SAMIEC 2010/03/24 APPR: APATEL 2010/03/25 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | | | mm | INCH | DRAWN BY | DATE | TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL CPI | |
| | | 4 PLACES | ± --- | ± --- | SAMIEC | 2005/04/14 | | |
| | | 3 PLACES | ± --- | ± --- | CHECKED BY | DATE | | |
| | | 2 PLACES | ± 0.25 | ± --- | SAMIEC | 2005/04/14 | | |
| 1 PLACE | ± 0.25 | ± --- | APPROVED BY | DATE | MOLEX INCORPORATED | | | |
| ANGULAR ±1/2° | | MARGULIS | 2005/04/14 | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NUMBER | | DOCUMENT NO. | | SHEET NO. | | |
| | | SEE CHART | | SD-45912-001 | | 3 | | |
| SIZE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

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- Экспресс доставка в любую точку России;
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- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

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(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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