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**Part Number:** [0481911000](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.80mm (.031") Pitch Edge Card Connector, Vertical, SMT, 60 Circuits, 0.38µm (15µ") Gold (Au) Plating, Lead Free

**Agency Certification**

|     |          |
|-----|----------|
| CSA | LR 19980 |
| UL  | E29179   |

**General**

|                |                       |
|----------------|-----------------------|
| Product Family | Edge Card Connectors  |
| Series         | <a href="#">48191</a> |
| Component Type | Edgecard to PCB       |
| Overview       | edge_card_connectors  |
| Product Name   | Edge Card             |

**Physical**

|                                |                      |
|--------------------------------|----------------------|
| Circuits (Loaded)              | 60                   |
| Circuits (maximum)             | 60                   |
| Circuits Detail                | All Signal           |
| Durability (mating cycles max) | 100                  |
| Entry Angle                    | Vertical (Top Entry) |
| Flammability                   | 94V-0                |
| Keying to Mating Part          | Yes                  |
| Material - Plating Mating      | Gold                 |
| Material - Plating Termination | Tin                  |
| PCB Locator                    | Yes                  |
| PCB Retention                  | Yes                  |
| Packaging Type                 | Tube                 |
| Pitch - Mating Interface (in)  | 0.031 In             |
| Pitch - Mating Interface (mm)  | 0.80 mm              |
| Pitch - Term. Interface (in)   | 0.031 In             |
| Pitch - Term. Interface (mm)   | 0.80 mm              |
| Plating min: Mating (µin)      | 15                   |
| Plating min: Mating (µm)       | 0.38                 |
| Plating min: Termination (µin) | 100                  |
| Plating min: Termination (µm)  | 2.50                 |
| Temperature Range - Operating  | -40°C to +105°C      |
| Termination Interface: Style   | Surface Mount        |

**Electrical**

|                               |         |
|-------------------------------|---------|
| Current - Maximum per Contact | 1.7A    |
| Voltage - Maximum             | 400V AC |

**Material Info**

**Reference - Drawing Numbers**

|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-48191-001 |
| Product Specification   | PS-48191-001 |
| Sales Drawing           | SD-48191-001 |
| Test Summary            | TS-48191-001 |

**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](mailto: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.

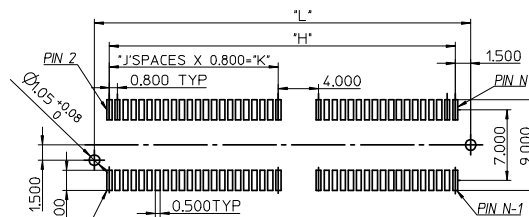
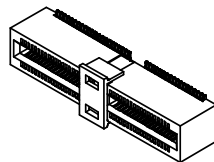
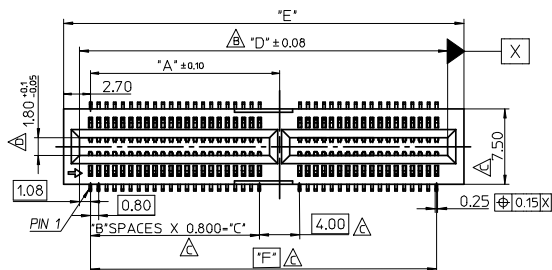
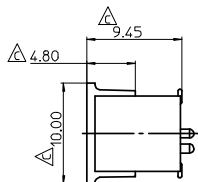
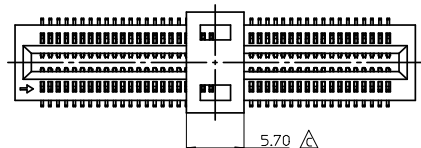
**Search Parts in this Series**

[48191Series](#)

**Mates With**

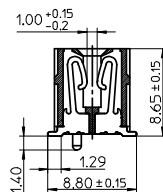
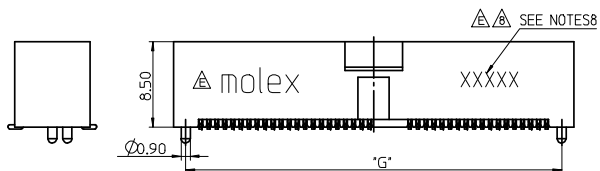
1.60mm (.063") Thick Edge Card Module

10 9 8 7 6 5 4 3 2 1



| POSITION | "H"    | "J" | "K"    | "L"    |
|----------|--------|-----|--------|--------|
| 80ckt    | 34,400 | 21  | 16,800 | 37,400 |
| 120ckt   | 50,400 | 31  | 24,800 | 53,400 |
| 140ckt   | 58,400 | 36  | 28,800 | 61,400 |
| 200ckt   | 82,400 | 51  | 40,800 | 85,400 |

RECOMMENDED PCB LAYOUT



NOTES:

1. MATERIAL:  
HOUSING: LIQUID CRYSTAL POLYMER 30% GLASS FIBER UL 94V-0 RATED  
COLOR: BLACK  
CONTACT: PHOSPHOR BRONZE.
2. PLATING:  
TERMINAL :  
CONTACT AREA: SEE TABLE  
SOLDER TAIL AREA : 100 MICROINCH MIN. TIN OVER 50 MICROINCH MIN. NICKEL.OVERALL
3. PRODUCT SPECIFICATION: PS-48191-001
4. PACKAGING SPECIFICATION: PK-48191-001
5. TEST SUMMARY : TS-48191-001
6. COPLANARITY SHOULD BE 0.1mm MAX

7. LEAD FREE AND ROHS COMPLIANCE PRODUCT.  
DATE CODE:XX<YEAR> XX<WEEK> X<LOCATION>

| No OF POS | "A"   | "B" | "C"   | "D"   | "E"   | "F"   | "G"   |
|-----------|-------|-----|-------|-------|-------|-------|-------|
| 80ckt     | 18,80 | 21  | 16,80 | 36,55 | 39,80 | 34,40 | 37,40 |
| 120ckt    | 26,80 | 31  | 24,80 | 52,55 | 55,80 | 50,40 | 53,40 |
| 140ckt    | 30,80 | 36  | 28,80 | 60,55 | 63,80 | 58,40 | 61,40 |
| 200ckt    | 42,80 | 51  | 40,80 | 84,55 | 87,80 | 82,40 | 85,40 |

|            |     |                   |
|------------|-----|-------------------|
| 48191-6000 | 200 | GOLD 15 MICROINCH |
| 48191-4000 | 140 | GOLD 15 MICROINCH |
| 48191-3000 | 120 | GOLD 15 MICROINCH |
| 48191-2000 | 80  | GOLD 15 MICROINCH |
| MOLEX P/N  | CKT | CONTACT PLATING   |

ib\_frame\_A3\_P\_AM\_T  
Rev. E 2006/04/15

REMOVE MATERIAL NO.  
EC NO: SH2008-0651  
2008/06/25  
DRWN:LIU10  
CHKD:YLZHU  
APPR:HWANG  
2008/08/07

QUALITY SYMBOLS  
=0  
=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

|          | mm     | INCH  |
|----------|--------|-------|
| 4 PLACES | ± ---  | ± --- |
| 3 PLACES | ± ---  | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE  | ± 0.25 | ± --- |

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
MM ONLY

|             |            |                                       |
|-------------|------------|---------------------------------------|
| DRAWN BY    | DATE       | TITLE                                 |
| TOM         | 2005/10/15 | 0.8MM EDGE CARD<br>CONNECTOR SMT TYPE |
| CHECKED BY  | DATE       |                                       |
| ALLEN       | 2005/10/15 |                                       |
| APPROVED BY | DATE       |                                       |
| WILSON      | 2005/10/15 |                                       |

MATERIAL NO.  
SEE TABLE

SCALE  
1:1

DESIGN UNITS  
METRIC

THIRD ANGLE  
PROJECTION

MOLEX INCORPORATED  
SD-48191-001

SHEET NO.  
1 OF 3

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F

E

D

C

B

A

F

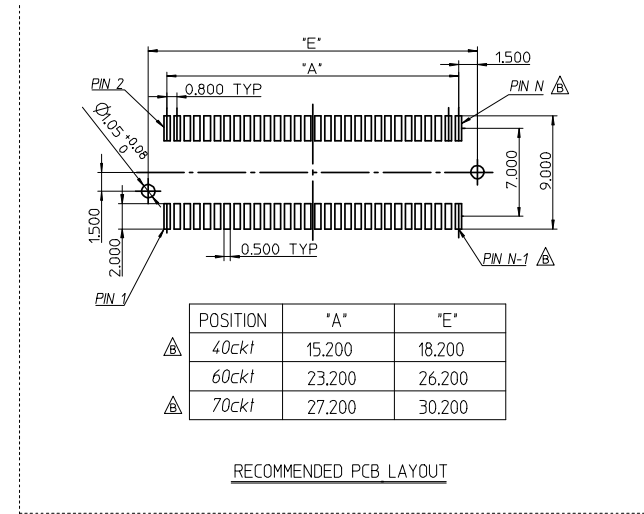
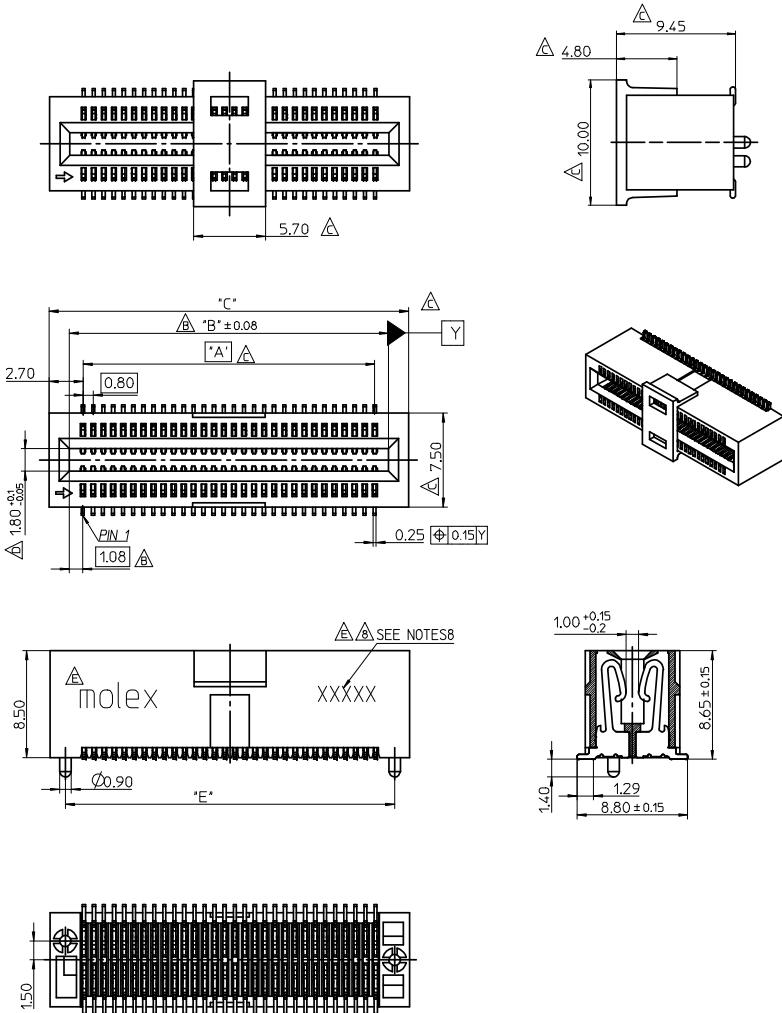
E

D

C

B

A



| No OF POS | A     | B     | C     | E     |
|-----------|-------|-------|-------|-------|
| 40ckt     | 15.20 | 17.35 | 20.60 | 18.20 |
| 60ckt     | 23.20 | 25.35 | 28.60 | 26.20 |
| 70ckt     | 27.20 | 29.35 | 32.60 | 30.20 |

|            |     |                   |
|------------|-----|-------------------|
| 48191-5000 | 70  | GOLD 15 MICROINCH |
| 48191-1000 | 60  | GOLD 15 MICROINCH |
| 48191-7000 | 40  | GOLD 15 MICROINCH |
| MOLEX P/N  | CKT | CONTACT PLATING   |

REMOVE MATERIAL NO.  
EC NO: SH2008-0651  
TIDRWLLIU10  
CHKD: YLZHU  
APPR: HWANG

DESCRIPTION  
REV

QUALITY SYMBOLS  
=0  
=0

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

DIMENSION STYLE  
MM ONLY  
DRAWN BY TOM  
DATE 2005/10/15  
CHECKED BY ALLEN  
DATE 2005/10/15  
APPROVED BY WILSON  
DATE 2005/10/15  
MATERIAL NO.  
SEE TABLE

DIMENSION STYLE  
MM ONLY  
DRAWN BY TOM  
DATE 2005/10/15  
CHECKED BY ALLEN  
DATE 2005/10/15  
APPROVED BY WILSON  
DATE 2005/10/15  
MATERIAL NO.  
SEE TABLE

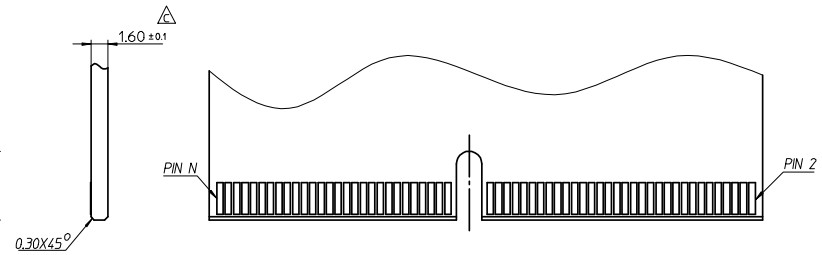
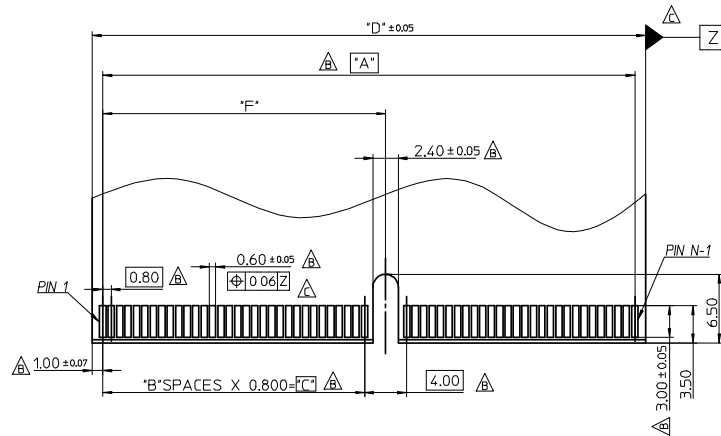
SCALE  
1:1  
TITLE  
0.8MM EDGE CARD CONNECTOR SMT TYPE  
MOLEX INCORPORATED  
SD-48191-001

THIRD ANGLE PROJECTION

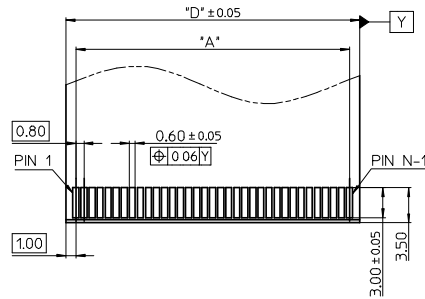
SHEET NO.  
2 OF 3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

# △ RECOMMENDED PCB MODULE LAYOUT (FOR 80~200CKT)



# ▽ △ RECOMMENDED PCB MODULE LAYOUT (FOR 40~70CKT)



| POSITION | "A"    | "B" | "C"    | "D"    | "F"    |
|----------|--------|-----|--------|--------|--------|
| 40ckt    | 15.200 | N/A | N/A    | 17.200 | N/A    |
| 60ckt    | 23.200 | N/A | N/A    | 25.200 | N/A    |
| 70ckt    | 27.200 | N/A | N/A    | 29.200 | N/A    |
| 80ckt    | 34.400 | 21  | 16.800 | 36.400 | 18.800 |
| 120ckt   | 50.400 | 31  | 24.800 | 52.400 | 26.800 |
| 140ckt   | 58.400 | 36  | 28.800 | 60.400 | 30.800 |
| 200ckt   | 82.400 | 51  | 40.800 | 84.400 | 42.800 |

|                                                                                     |             |                                   |                                                      |        |                            |              |              |                                                                                                                               |                        |           |  |  |
|-------------------------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------|--------|----------------------------|--------------|--------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|--|--|
| REMOVE MATERIAL NO.<br>EC NO: SH2008-0651<br>DRWN:LIU10<br>CHKD:YLZHU<br>APPR:HWANG | DESCRIPTION | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                |        | DIMENSION STYLE<br>MM ONLY |              | SCALE<br>1:1 | DESIGN UNITS<br>METRIC                                                                                                        | THIRD ANGLE PROJECTION |           |  |  |
|                                                                                     |             |                                   |                                                      | mm     | INCH                       | DRAWN BY     | DATE         | TITLE<br>0.8MM EDGE CARD CONNECTOR SMT TYPE                                                                                   |                        |           |  |  |
|                                                                                     |             |                                   | 4 PLACES                                             | ± ---  | ± ---                      | TOM          | 2005/10/15   |                                                                                                                               |                        |           |  |  |
|                                                                                     |             |                                   | 3 PLACES                                             | ± ---  | ± ---                      | CHECKED BY   | DATE         | MOLEX INCORPORATED                                                                                                            |                        |           |  |  |
|                                                                                     |             |                                   | 2 PLACES                                             | ± 0.25 | ± ---                      | ALLEN        | 2005/10/15   |                                                                                                                               |                        |           |  |  |
|                                                                                     |             |                                   | 1 PLACE                                              | ± 0.25 | ± ---                      | APPROVED BY  | DATE         | MOLEX INCORPORATED                                                                                                            |                        |           |  |  |
|                                                                                     |             |                                   | ANGULAR ± 3 °                                        |        |                            | WILSON       | 2005/10/15   |                                                                                                                               |                        |           |  |  |
|                                                                                     |             |                                   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        |                            | MATERIAL NO. |              | DOCUMENT NO.                                                                                                                  |                        | SHEET NO. |  |  |
|                                                                                     |             |                                   |                                                      |        |                            | SEE TABLE    |              | SD-48191-001                                                                                                                  |                        | 3 OF 3    |  |  |
|                                                                                     |             |                                   |                                                      |        |                            | SIZE A3      |              | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |           |  |  |