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Part Number: [0850039002](#)
Status: **Active**
Overview: [din_41612](#)
Description: 2.54mm (.100") Pitch DIN 41612 C/2 Style Male Header, Right Angle, Through Hole, 0.80µm (32µ") Selective Gold (Au) Plating, 48 Circuits, without Mounting Clips, No Flux Proof, Lead free, High Temperature version

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [85003](#)
 Application Backplane
 Comments No Mounting Clips. No Flux Proof. 5.4mm(.213") First-Mate-Last-BreakContacts. 4.8mm(.189") Normal Contacts
 Component Type PCB Header
 Overview [din_41612](#)
 Product Name IEC 603-2/DIN 41612
 Style C/2

Physical

Circuits (Loaded) 48
 Circuits (maximum) 48
 Circuits Detail Standard Contacts at: A:a1,a16; C:c1,c16. Last-Mate-First-Break Contacts at: X:c2-c15; Y:b1-b16; Z:a2-a15
 Color - Resin Natural
 Durability (mating cycles max) 400
 First Mate / Last Break No
 Flammability 94V-0
 Guide to Mating Part No
 Keying to Mating Part Yes
 Material - Metal Brass
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Columns 16
 Number of Pairs Open Pin Field
 Number of Rows 3
 Orientation Right Angle
 PC Tail Length (in) 0.118 In
 PC Tail Length (mm) 3.00 mm
 PCB Locator No
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Carton
 Pitch - Mating Interface (in) 0.100 In
 Pitch - Mating Interface (mm) 2.54 mm
 Pitch - Term. Interface (in) 0.100 In
 Pitch - Term. Interface (mm) 2.54 mm

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
[85003Series](#)

| | |
|---|-----------------|
| Plating min: Mating (μin) | 32 |
| Plating min: Mating (μm) | 0.80 |
| Plating min: Termination (μin) | 98 |
| Plating min: Termination (μm) | 2.5 |
| Polarized to PCB | Yes |
| Stackable | No |
| Surface Mount Compatible (SMC) | No |
| Temperature Range - Operating | -55°C to +125°C |
| Termination Interface: Style | Through Hole |

Electrical

| | |
|-------------------------------|---------------|
| Current - Maximum per Contact | 1A |
| Data Rate | 622.0 Mbps |
| Voltage - Maximum | 250V AC (RMS) |

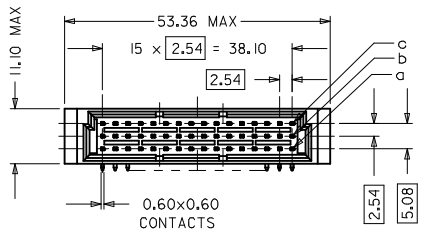
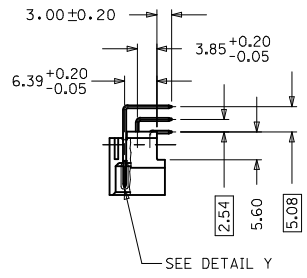
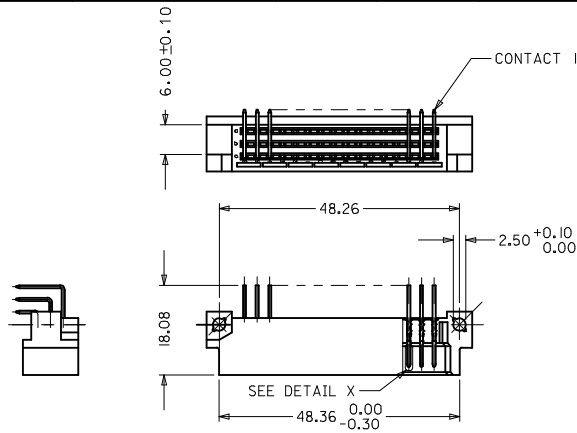
Material Info

Reference - Drawing Numbers

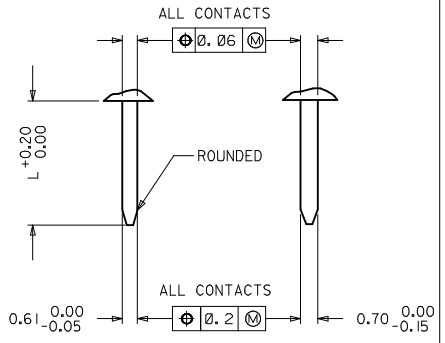
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| Packaging Specification | PK-85003-002 |
| Sales Drawing | SD-85003-0002, SD-85003-9002 |

This document was generated on 05/17/2010

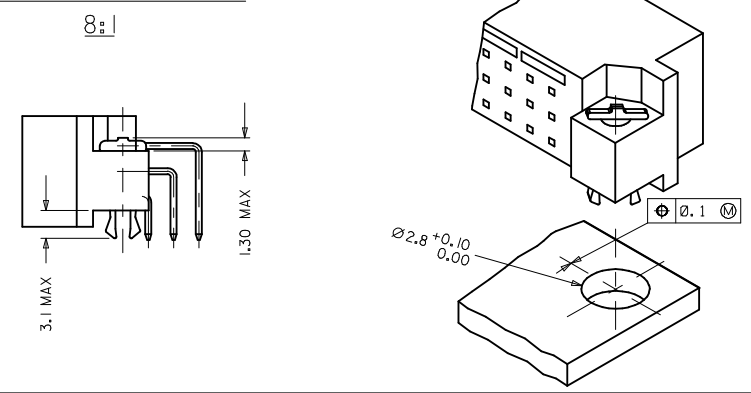
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DETAILY DETAILX

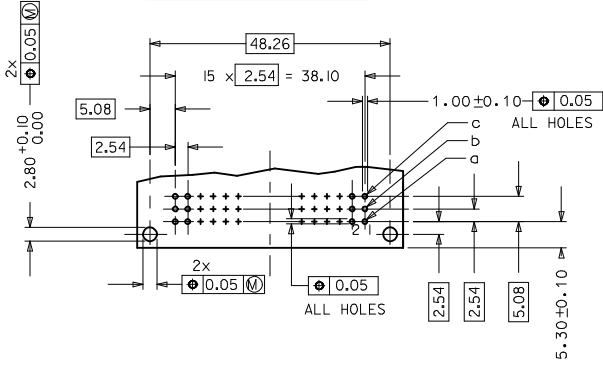


WITH MOUNTING CLIPS



- NOTES:
- MATERIALS: THERMX (PCT), GLASS FILLED, UL94V-0, COLOUR: NATURAL
TERMINAL - BRASS
MOUNTING CLIP: STEEL
 - FINISH: TERMINAL:- CONTACT AREA
 - PERFORMANCE LEVEL 1: SELECTIVE GOLD (Au), THICKNESS = 1.1 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 - PERFORMANCE LEVEL 2: SELECTIVE GOLD (Au), THICKNESS = 0.6 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 - PERFORMANCE LEVEL 3: SELECTIVE GOLD (Au), THICKNESS = 0.3 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 TERMINATION AREA:
SELECTIVE TIN, THICKNESS = 2.5 MICROMETER
OVER NICKEL, THICKNESS = 1.25 MICROMETER OVERALL
 - MOUNTING CLIP:-
TIN (Sn), THICKNESS = 5-10 MICROMETER,
OVER NICKEL (Ni), THICKNESS = 2.5 MICROMETER
 - FOR NON MOUNTING CLIP OPTION, CONNECTOR TO BE SECURED WITH RIVETS: 2 TUBULAR RIVETS 2.5 x 0.3 ... DIN 7340
SCREWS: 2 CHEESEHEAD SCREWS M2.5 x ... DIN 84 AND 2 HEXAGONAL NUTS M2.5 DIN 934
 - STANDARD MARKING: MOLEX, MATERIAL NUMBER, BATCH CODE,
 - CUT FACE OF TIP WITHOUT PLATING PERMITTED
 - PRODUCT SPECIFICATION PS : 85003-0001

RECOMMENDED PCB LAYOUT
COMPONENT SIDE



| | |
|---------------------|-----|
| PRE MATING CONTACTS | 5.4 |
| NORMAL CONTACTS | 4.8 |
| | L |

RoHS COMPLIANT

| | | | | | | |
|---|-----------------|---------------------------------------|---|----------------------------|---|------------------------|
| EC NO: I2007-0172 DRAWN: JAYENGG 2008/06/19 CHKD: SUDHIR 2009/01/17 APPR: KRASAO 2009/01/17 REV: C1 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | ▽=0 | mm INCH | MM ONLY | 2:1 | METRIC | |
| | ▽=0 | 4 PLACES ± 0.05 | DRAWN BY: NS | DATE: 2001/05/14 | TITLE: 48 POS. MALE CONNECTOR ACC. DIN 41612 STYLE C/2 CONTACTS | |
| | | 3 PLACES ± 0.05 | CHECKED BY: GJLOWE | DATE: 2001/05/14 | MOLEX INCORPORATED | |
| | 2 PLACES ± 0.1 | APPROVED BY: GJLOWE | DATE: 2001/05/14 | DOCUMENT NO. SD-85003-0002 | SHEET NO. 4 OF 4 | |
| | 1 PLACE ± 0.15 | ANGULAR ± 2° | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SIZE A1 | | | | |

20 19 18 17 16 15 14 13 12 11 9 8 7 6 5 4 3 2 1

VIEW ON MATING SIDE

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ○ | C | X | X | X | X | X | X | X | X | X | X | X | X | X | X | C |
| △ | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| ○ | A | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | A |

16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 -

A = 2 STANDARD CONTACTS L = 3
 C = 2 STANDARD CONTACTS L = 3
 Z = 14 LMFB CONTACTS -0.6 L = 3
 Y = 16 LMFB CONTACTS -0.6 L = 3
 X = 14 LMFB CONTACTS -0.6 L = 3
 S = 48 TOTAL NUMBER OF CONTACTS

| | |
|-------------------|--|
| MARKING | STANDARD |
| PERFORMANCE LEVEL | G2/O = CONTACT AREA LEVEL2 / TERMINATION TIN |
| FLUX PROOF | NO |
| FIXING CLIP | NO |
| DIMENSIONS | SD-85003-0002 SHT 4 |

| | | |
|----------------|-------------------|-------------------------|
| X | G2/O | c2-15 |
| Y | G2/O | b1-16 |
| Z | G2/O | a2-15 |
| C | G2/O | c1, c16 |
| A | G2/O | a1, a16 |
| CONTACT SYMBOL | PERFORMANCE LEVEL | CONTACT POSITION NUMBER |

| | | | | | | | | | | |
|---|--------------------------------------|--|-----|--|---|------------------------|---|------------------------------------|------------------------------------|--------------------|
| EC NO. I 2004-XXXX DRAWN N.S. 09/09/03 CHK'd G.L. 09/09/03 APPR. G.L. 09/09/03 | QUALITY SYMBOLS MAJOR CRITICAL | GENERAL TOLERANCES: (UNLESS SPECIFIED) | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | DIMENSIONS: | | SHT | REV |
| | | | | | <input type="checkbox"/> MM <input type="checkbox"/> INCH | | <input type="checkbox"/> INCH <input type="checkbox"/> MM | <input type="checkbox"/> INCH ONLY | <input type="checkbox"/> INCH ONLY | REVISE ON CAD ONLY |
| | | 4 PLACES | ±0. | ±. | | | | | | |
| | | 3 PLACES | ±0. | ±. | | | | | | |
| | | 2 PLACES | ±0. | ±. | | | | | | |
| | | 1 PLACE | ±0. | ±. | | | | | | |
| | | ANGULAR: ± | | | | | | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. | | | | | | |

24-border.DGN REV 4 96/06/12 LEVEL 6 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1