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**Part Number:** [0906633141](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch QF-50™ Right Angle, MIL Keying with Latch/Eject Levers, Shrouded Header, 14 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-99020-0015 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
UL E29179

**General**

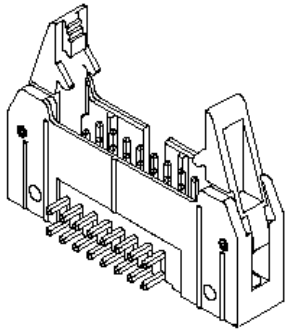
Product Family Ribbon Cable / Wire Trap Connectors  
Series [90663](#)  
Comments MIL/DIN Compliance  
Component Type PCB Header  
Glow-Wire Compliant No  
Product Name QF-50™

**Physical**

Circuits (Loaded) 14  
Color - Resin Black  
Durability (mating cycles max) 300  
Entry Angle 90° Angle  
Flammability 94V-0  
Lock to Mating Part None  
Material - Metal Brass  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin Polyester  
Number of Rows 2  
PCB Retention None  
PCB Thickness Recommended (in) 0.062 In  
PCB Thickness Recommended (mm) 1.60 mm  
Packaging Type Tray  
Pitch - Mating Interface (in) 0.100 In  
Pitch - Mating Interface (mm) 2.54 mm  
Plating min: Mating (µin) 4  
Plating min: Mating (µm) 0.1  
Plating min: Termination (µin) 118  
Plating min: Termination (µm) 3  
Polarized to PCB No  
Shrouded Fully  
Stackable No  
Surface Mount Compatible (SMC) No  
Temperature Range - Operating -25°C to +85°C  
Termination Interface: Style Through Hole  
Wire Insulation Diameter N/A  
Wire Size AWG N/A  
Wire/Cable Type Ribbon Cable

**Electrical**

Current - Maximum per Contact 2.5A  
Voltage - Maximum 250V AC/DC



*Series  
image - Reference only*

**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](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**  
[90663Series](#)

**Mates With**  
[90635](#)

**Solder Process Data**

Lead-free Process Capability

Wave Capable (TH only)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

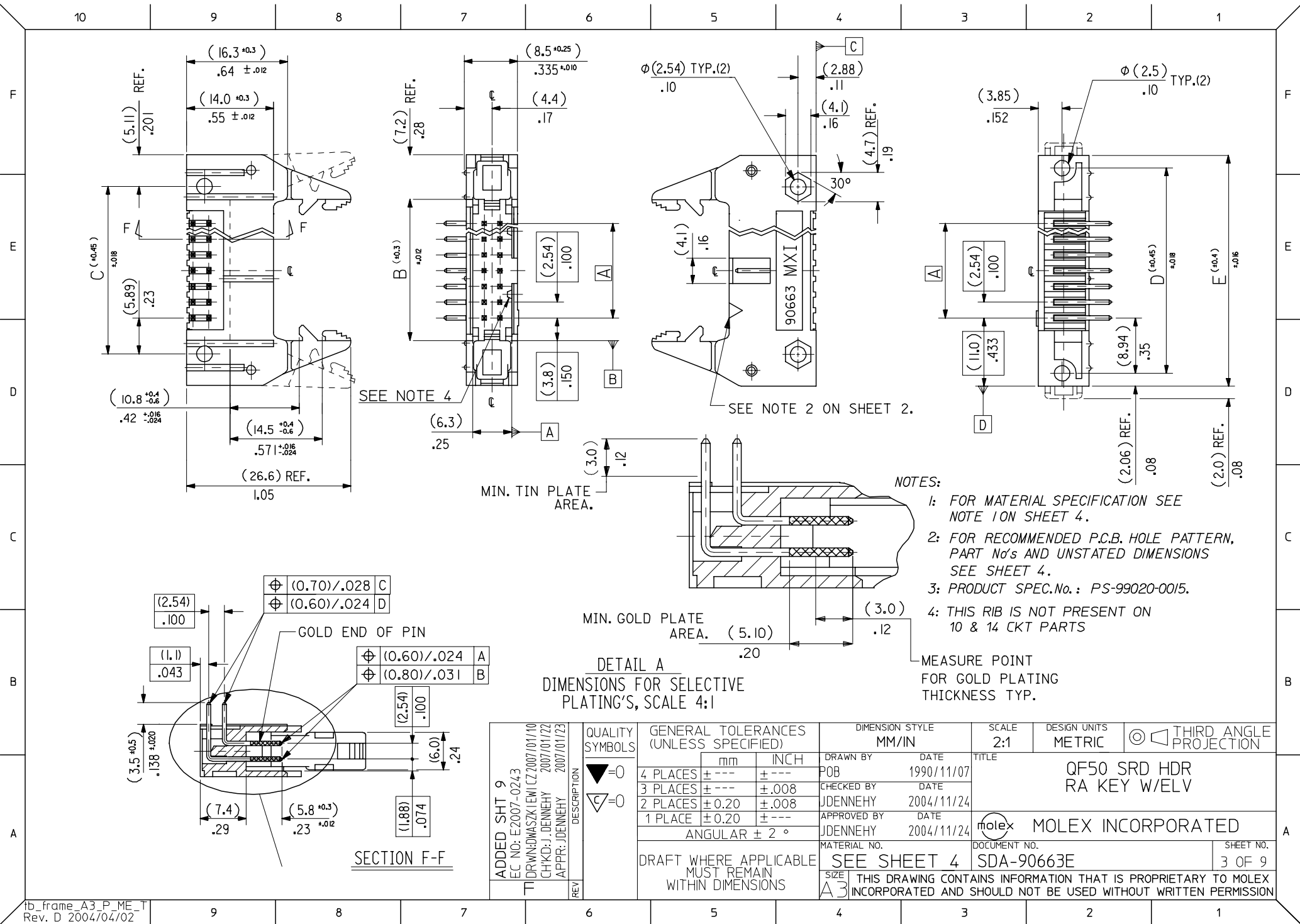
PS-99020-0015

Sales Drawing

SDA-90663E

This document was generated on 03/16/2010

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|               |               |               |               |                |                         |                         |                         |                     |                |
|---------------|---------------|---------------|---------------|----------------|-------------------------|-------------------------|-------------------------|---------------------|----------------|
| (78.74)/3.100 | (86.34)/3.400 | (90.52)/3.564 | (96.62)/3.804 | (100.74)/3.966 | 90663-3641              | 90663-3642              | 90663-3643              |                     | 64             |
| (73.66)/2.900 | (81.26)/3.200 | (85.44)/3.364 | (91.54)/3.604 | (95.66)/3.766  | ↑ -3601                 | ↑ -3602                 | ↑ -3603                 |                     | 60             |
| (60.96)/2.400 | (68.56)/2.700 | (72.74)/2.864 | (78.84)/3.104 | (82.96)/3.266  | -3501                   | -3502                   | -3503                   | 90663-3509          | 50             |
| (48.26)/1.900 | (55.86)/2.200 | (60.04)/2.364 | (66.14)/2.604 | (70.26)/2.766  | -3401                   | -3402                   | -3403                   | ↑ -3409             | 40             |
| (40.64)/1.600 | (48.24)/1.900 | (52.42)/2.064 | (58.52)/2.304 | (62.64)/2.466  | -3341                   | -3342                   | -3343                   | -3349               | 34             |
| (35.56)/1.400 | (43.16)/1.700 | (47.34)/1.864 | (53.44)/2.104 | (57.56)/2.266  | -3301                   | -3302                   | -3303                   | -3309               | 30             |
| (30.48)/1.200 | (38.08)/1.500 | (42.26)/1.664 | (48.36)/1.904 | (52.48)/2.066  | -3261                   | -3262                   | -3263                   | -3269               | 26             |
| (22.86)/.900  | (30.46)/1.200 | (34.64)/1.364 | (40.74)/1.604 | (44.86)/1.766  | -3201                   | -3202                   | -3203                   | -3209               | 20             |
| (17.78)/.700  | (25.38)/1.000 | (29.56)/1.164 | (35.66)/1.404 | (39.78)/1.566  | -3161                   | -3162                   | -3163                   | -3169               | 16             |
| (15.24)/.600  | (22.84)/.900  | (27.02)/1.064 | (33.12)/1.304 | (37.24)/1.466  | ↓ -3141                 | ↓ -3142                 | ↓ -3143                 | ↓ -3149             | 14             |
| (10.16)/.400  | (17.76)/.700  | (21.94)/.864  | (28.04)/1.104 | (32.16)/1.266  | 90663-3101              | 90663-3102              | 90663-3103              | 90663-3109          | 10             |
| A             | B             | C             | D             | E              | ENG. NO.<br>GSI PLATING | ENG. NO.<br>GS2 PLATING | ENG. NO.<br>GS3 PLATING | ENG. NO.<br>PRE TIN | NO.OF<br>CKTS. |

#### NOTES

##### 1.MATERIAL

HEADER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.

PINS : BRASS SIZE  $\square$  (0.635)/.025 .

LEVER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.

SPRING PINS : STEEL

##### 2.COLOUR IDENTIFICATION MARK FOR PLATING OPTIONS.

90663-3\*\*1, (1um)/.039uin MIN. NICKEL UNDERPLATE. CONTACT AREA

GSI PLATING (0.1um)/.004uin MIN. GOLD. SOLDER AREA (3um)/.118uin MIN.

TIN. COLOUR MARK: YELLOW.

90663-3\*\*2, (1um)/.039uin MIN. NICKEL UNDERPLATE. CONTACT AREA

GS2 PLATING (0.76um)/.030uin MIN. GOLD. SOLDER AREA (3um)/.118uin MIN.

TIN. COLOUR MARK: BROWN.

90663-3\*\*3, (1um)/.039uin MIN. NICKEL UNDERPLATE. CONTACT AREA

GS3 PLATING (0.25um)/.010uin MIN. GOLD. SOLDER AREA (3um)/.118uin MIN.

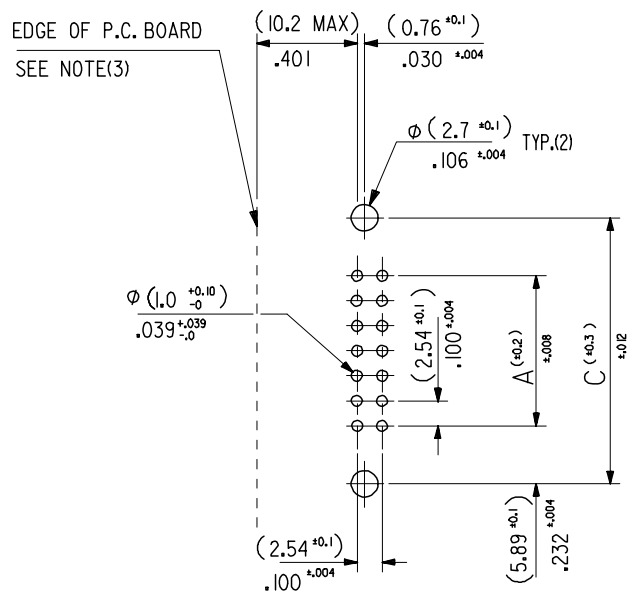
TIN. COLOUR MARK: BLUE.

90663-3\*\*9, (0.5-1um)/.020-.040uin NICKEL UNDER (1.0-3.0um)/.039-.118uin TIN.

PRE-TIN COLOUR MARK: BLACK, (NO MARK).

##### 3. 10.2mm MAX. TO EDGE OF PCB FOR DAISY CHAIN APPLICATIONS.

##### 4. RECOMMENDED PCB THICKNESS 1.6mm



RECOMMENDED P.C.B.HOLE PATTERN.

|                                                                                                              |                                   |                                                                                                                               |                                       |        |                           |                    |                                       |                        |                           |  |  |  |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------|---------------------------|--------------------|---------------------------------------|------------------------|---------------------------|--|--|--|
| ADDED NOTE 4<br>EC NO: E2008-0129<br>DRWN:DBYRNES 2007/09/13<br>CHKD: 2007/09/13<br>APPR:EOMAHONY 2007/09/14 | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | DESCRIPTION                                                                                                                   | GENERAL TOLERANCES (UNLESS SPECIFIED) |        | DIMENSION STYLE<br>MM/IN  |                    | SCALE<br>2:1                          | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |  |  |  |
|                                                                                                              |                                   |                                                                                                                               | mm                                    | INCH   | DRAWN BY<br>POB           | DATE<br>1990/11/07 | TITLE<br>QF50 SRD HDR<br>RA KEY W/ELV |                        |                           |  |  |  |
|                                                                                                              |                                   |                                                                                                                               | 4 PLACES ± ---                        | ± ---  | CHECKED BY<br>ROC         | DATE<br>2000/10/04 |                                       |                        |                           |  |  |  |
|                                                                                                              |                                   |                                                                                                                               | 3 PLACES ± ---                        | ± .008 | APPROVED BY<br>MW         |                    |                                       | DATE<br>2000/10/04     | MOLEX INCORPORATED        |  |  |  |
|                                                                                                              |                                   |                                                                                                                               | 2 PLACES ± 0.20                       | ± .008 |                           |                    |                                       |                        |                           |  |  |  |
|                                                                                                              |                                   |                                                                                                                               | 1 PLACE ± 0.20                        | ± ---  | MATERIAL NO.<br>SEE CHART |                    |                                       |                        |                           |  |  |  |
| ANGULAR ± 2 °                                                                                                |                                   |                                                                                                                               |                                       |        |                           |                    |                                       |                        |                           |  |  |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                   |                                   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                       |        |                           |                    |                                       |                        |                           |  |  |  |