

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0908971201](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100) Pitch QF-50™, Right Angle, Dual Row with Eject Levers, Shrouded Header, 20 Circuits, Without Strain Relief

**Documents:**

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

**General**

|                     |                                     |
|---------------------|-------------------------------------|
| Product Family      | Ribbon Cable / Wire Trap Connectors |
| Series              | <a href="#">90897</a>               |
| Comments            | Din Eject Levers                    |
| Component Type      | PCB Header                          |
| Glow-Wire Compliant | No                                  |
| Product Name        | QF-50™                              |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Circuits (Loaded)              | 20              |
| Circuits (maximum)             | 20              |
| Color - Resin                  | Black           |
| Durability (mating cycles max) | 30              |
| Entry Angle                    | 90° Angle       |
| Lock to Mating Part            | None            |
| Material - Metal               | Brass           |
| Material - Plating Mating      | Gold            |
| Material - Plating Termination | Tin             |
| Material - Resin               | Polyester Alloy |
| 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         |
| Polarized to Mating Part       | No              |
| Polarized to PCB               | No              |
| Shrouded                       | Yes             |
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -40°C to +105°C |
| Wire Insulation Diameter       | N/A             |
| Wire Size AWG                  | N/A             |
| Wire/Cable Type                | Ribbon Cable    |

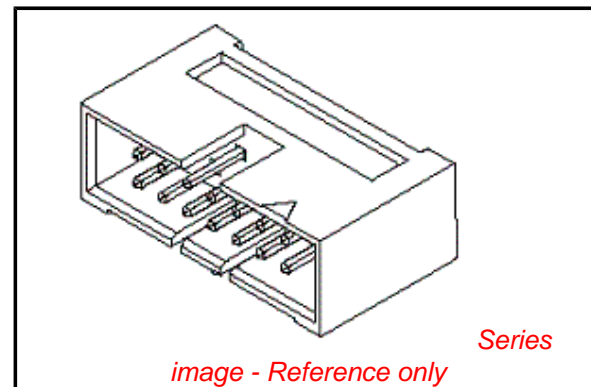
**Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 1A   |
| Voltage - Maximum             | 250V |

**Material Info**

**Reference - Drawing Numbers**

|               |           |
|---------------|-----------|
| Sales Drawing | SDA-90897 |
|---------------|-----------|



**EU RoHS**

**China RoHS**

**Compliance Status**

**Not Reviewed**

**REACH SVHC**

**Not Reviewed**

**Halogen-Free**

**Status**

**Not Reviewed**

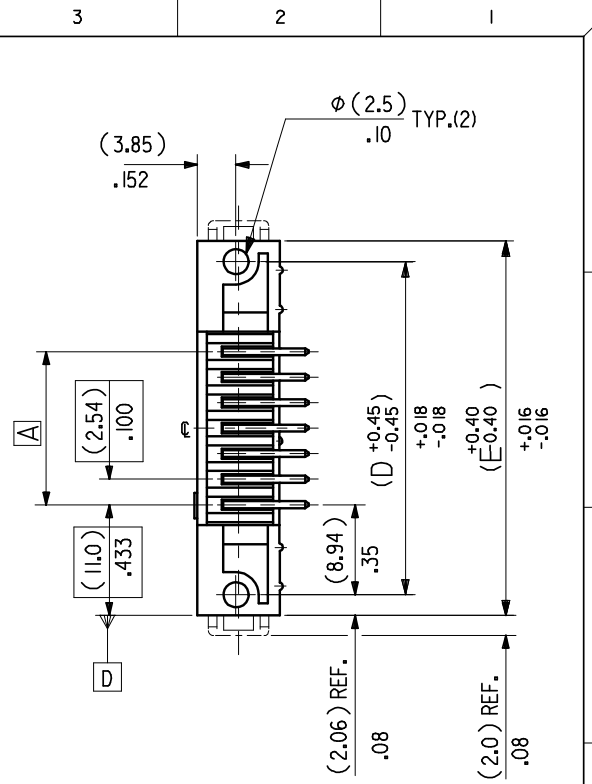
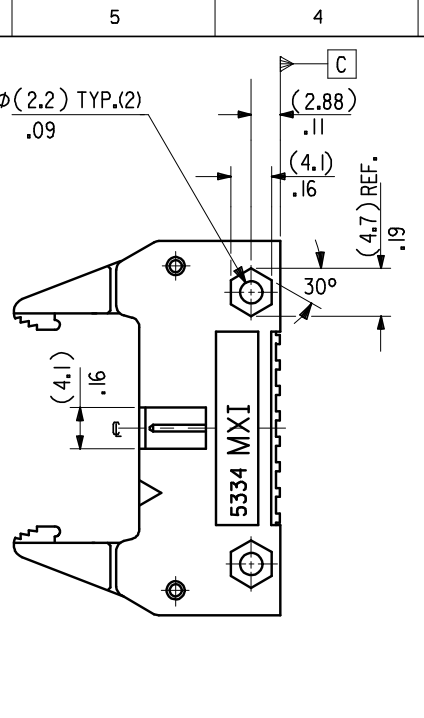
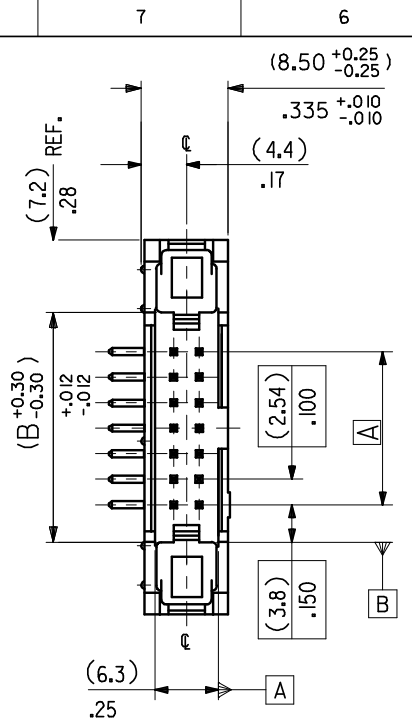
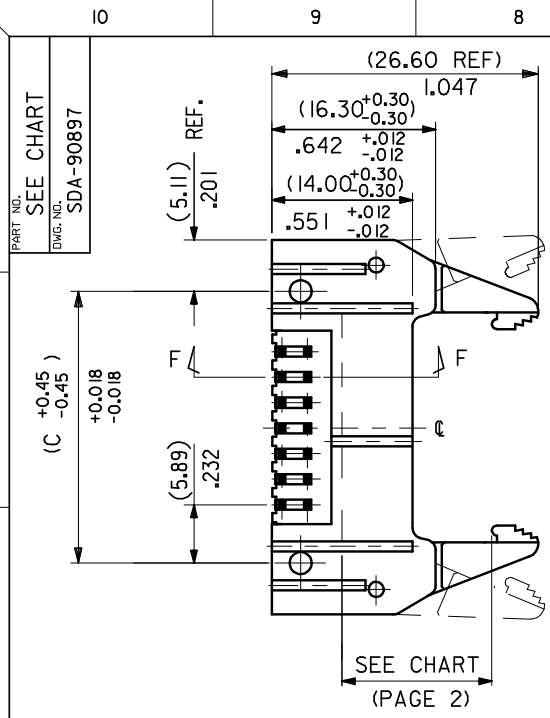
**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

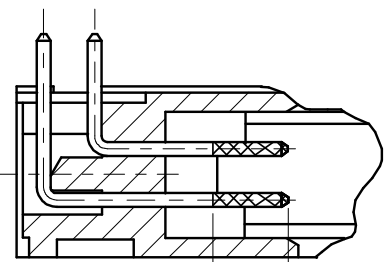
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[90897Series](#)

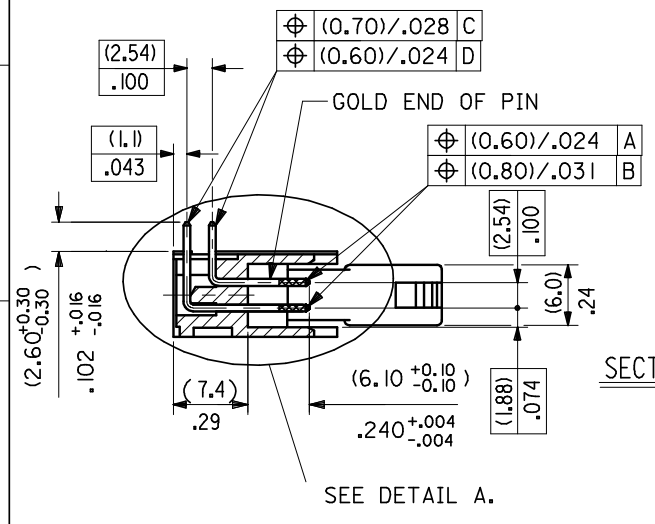


DETAIL A  
DIM'S FOR SELECTIVE  
GOLD PLATING



(3.00) REF.  
MEASURE POINT  
FOR GOLD PLATING  
THICKNESS TYP.

- NOTES:
- 1: FOR MATERIAL SPECIFICATION SEE NOTE 1, ON SHEET 2.
  - 2: FOR RECOMMENDED P.C.B.HOLE PATTERN, PART No's AND UNSTATED DIMENSIONS SEE SHEET 2.
  - 3: PRODUCT SPEC.No.: ES 990206
- PLEASE  
REFER TO  
USE ONLY



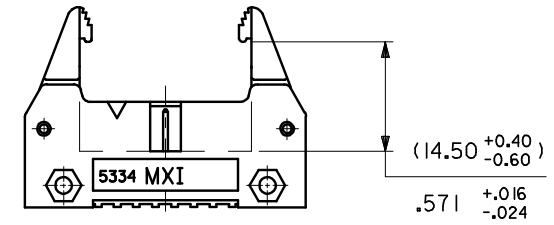
SECTION F-F

FOR PREVIOUS  
DRAWING ISSUES  
SEE MRI.

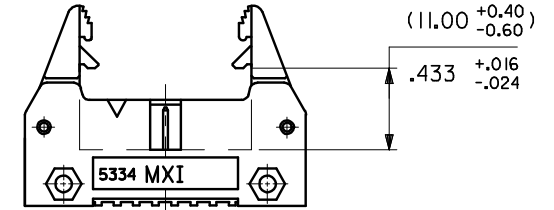
| REVISION UP-DATE<br>E2004-0192<br>E.C.No. PSHEAHAN 04/02/17<br>CHK'S APPR.   |        | THIRD ANGLE PROJECTION  |  | REVISE ONLY ON CAD SYSTEM                         |                |        |  |                |        |  |                |        |  |                        |  |   |  |
|--|--------|---|--|---|----------------|--------|--|----------------|--------|--|----------------|--------|--|------------------------|--|---|--|
| DIMENSIONS SHOWN ( METRIC ) INCH<br>UNLESS OTHERWISE SPECIFIED<br>TOLERANCES: ANGULAR ± 2°   |        | DRWG BY<br>PW   |  | CAD/CAM FILENAME<br>S90897X1<br>DGN               |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| <table border="1"> <tr> <th colspan="3">INCH ( METRIC )</th> </tr> <tr> <td>3 PLACE ± .008</td> <td>± 0.20</td> <td></td> </tr> <tr> <td>2 PLACE ± .008</td> <td>± 0.20</td> <td></td> </tr> <tr> <td>1 PLACE ± .008</td> <td>± 0.20</td> <td></td> </tr> </table> |        | INCH ( METRIC )   |  |   | 3 PLACE ± .008 | ± 0.20 |  | 2 PLACE ± .008 | ± 0.20 |  | 1 PLACE ± .008 | ± 0.20 |  | CHECK'D BY<br>APP'D BY |  | TITLE<br>QF-50 R/A HEADER<br>WITH DIN EJECT LEVERS<br>TO MATE WITH MX-50 FEMALE |  |
| INCH ( METRIC )  |        |   |  |   |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| 3 PLACE ± .008   | ± 0.20 |   |  |   |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| 2 PLACE ± .008   | ± 0.20 |   |  |   |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| 1 PLACE ± .008   | ± 0.20 |   |  |   |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS  |        | SCALE<br>2:1  |  | SHEET NO. DATE<br>10F2 94/11/07                   |                |        |  |                |        |  |                |        |  |                        |  |   |  |
| DESIGN DIMENSION <input checked="" type="checkbox"/> (MM)<br>(PRIMARY) <input type="checkbox"/> IN.  |        | EQUIVALENT DIMENSION <input type="checkbox"/> (MM)<br>(SECONDARY) <input checked="" type="checkbox"/> IN. |  | PART NO. SEE CHART<br>DWG NO. SDA-90897<br>SIZE B |                |        |  |                |        |  |                |        |  |                        |  |   |  |

PART NO. SEE CHART  
 DWG. NO. SDA-90897

|               |               |               |               |                |            |                |
|---------------|---------------|---------------|---------------|----------------|------------|----------------|
| (78.74)/3.100 | (86.34)/3.400 | (90.52)/3.564 | (96.62)/3.804 | (100.74)/3.966 | 90897-*64* | 64             |
| (73.66)/2.900 | (81.26)/3.200 | (85.44)/3.364 | (91.54)/3.604 | (95.66)/3.766  | -*60*      | 60             |
| (60.96)/2.400 | (68.56)/2.700 | (72.74)/2.864 | (78.84)/3.104 | (82.96)/3.266  | -*50*      | 50             |
| (48.26)/1.900 | (55.86)/2.200 | (60.04)/2.364 | (66.14)/2.604 | (70.26)/2.766  | -*40*      | 40             |
| (40.64)/1.600 | (48.24)/1.900 | (52.42)/2.064 | (58.52)/1.304 | (62.64)/2.466  | -*34*      | 34             |
| (35.56)/1.400 | (43.16)/1.700 | (47.34)/1.864 | (53.44)/2.104 | (57.56)/2.266  | -*30*      | 30             |
| (30.48)/1.200 | (38.08)/1.500 | (42.26)/1.664 | (48.36)/1.904 | (52.48)/2.066  | -*26*      | 26             |
| (22.86)/.900  | (30.46)/1.200 | (34.64)/1.364 | (40.74)/1.604 | (44.86)/1.766  | -*20*      | 20             |
| (17.78)/.700  | (25.38)/1.000 | (29.56)/1.164 | (35.66)/1.404 | (39.78)/1.566  | -*16*      | 16             |
| (15.24)/.600  | (22.84)/.900  | (27.02)/1.064 | (33.12)/1.304 | (37.24)/1.466  | -*14*      | 14             |
| (10.16)/.400  | (17.76)/.700  | (21.94)/.864  | (28.04)/1.104 | (32.16)/1.266  | 90897-*10* | 10             |
| A             | B             | C             | D             | E              | ENG. NO.   | NO.OF<br>CKTS. |

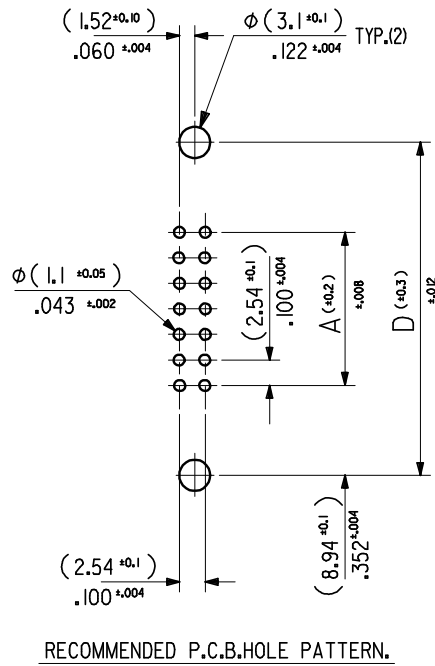


90897-2\*\*\* STRAIN RELIEF VERSION



90897-1\*\*\* NON STRAIN RELIEF VERSION

- 1\*\*\* LATCH FOR FEMALE WITH NO STRAIN RELIEF
- 2\*\*\* LATCH FOR FEMALE WITH STRAIN RELIEF
- PLATING TYPE
- CCT SIZE



RECOMMENDED P.C.B. HOLE PATTERN.

NOTES

1.MATERIAL

- HEADER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.
- LEVER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.
- PINS : BRASS SIZE (0.635)/.025 .
- SPRING PINS : STEEL

2.PLATING TYPE

- UNDERPLATE FOR ALL PLATING TYPES, (1um)/39uin MIN. NICKEL OVERALL.
- \*\*\*1 PLATING (0.1um)/4uin MIN GOLD. SOLDER AREA (3um)/118uin MIN TIN
- \*\*\*2 PLATING (0.76um)/30uin MIN GOLD. SOLDER AREA (3um)/118uin MIN TIN
- \*\*\*3 PLATING (0.25um)/10uin MIN GOLD. SOLDER AREA (3um)/118uin MIN TIN

PRE-RELEASE  
 REFERENCE  
 USE ONLY

FOR PREVIOUS  
 DRAWING ISSUES  
 SEE MRI.

|   |  |  |  |                              |  |   |          |
|---|--|--|--|------------------------------|--|---|----------|
| LEAD FREE CONVERSION<br>ECN: E2004-0792<br>DRWING: PSHEAHAN 04/02/IT                                |  | THIRD ANGLE PROJECTION   |  | REVISE ONLY ON CAD SYSTEM    |  | SH.   | REV.     |
| DIMENSIONS SHOWN ( METRIC ) INCH<br>UNLESS OTHERWISE SPECIFIED<br>TOLERANCES: ANGULAR ± 2°          |  | DRWG BY<br>PW  |  | CAD/CAM FILENAME<br>S90897X2 |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |          |
| INCH ( METRIC )   |  | CHK'D BY   |  | TITLE                        |  | QF-50 R/A HEADER<br>WITH DIN EJECT LEVERS<br>TO MATE WITH MX-50 FEMALE  |          |
| 3 PLACE ± .008  |  | APP'D BY   |  | MOLEX MOLEX EUROPE           |  | SHEET NO.   | DATE     |
| 2 PLACE ± .020  |  | SCALE  |  | PART NO.                     |  | 20F   | 94/11/07 |
| 1 PLACE ±   |  | 2:1  |  | DWG NO.                      |  | SDA-90897   |          |
| DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS   |  | EQUIVALENT DIMENSION<br>(SECONDARY)  |  | SEE CHART                    |  | SIZE<br>B   |          |
| DESIGN DIMENSION <input checked="" type="checkbox"/> (MM)<br>(PRIMARY) <input type="checkbox"/> IN. |  | EQUIVALENT DIMENSION<br>(SECONDARY) <input type="checkbox"/> (MM)<br><input checked="" type="checkbox"/> IN. |  | SEE CHART                    |  | SIZE<br>B   |          |