

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

**Part Number:** [0906633401](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch QF-50™ Right Angle, MIL Keying with Latch/Eject Levers, Shrouded Header, 40 Circuits

**Documents:**

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

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

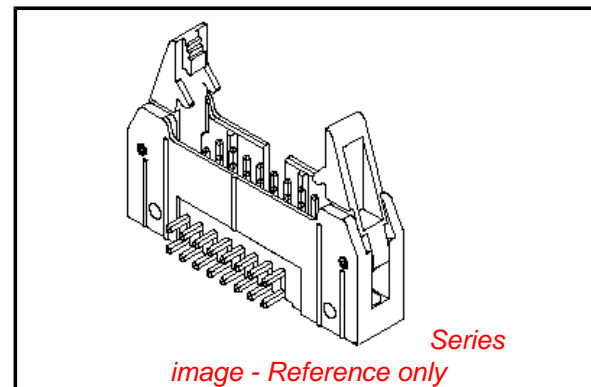
Product Family Ribbon Cable / Wire Trap Connectors  
 Series [90663](#)  
 Comments MIL/DIN Compliance  
 Component Type PCB Header  
 Glow-Wire Compliant No  
 Product Name QF-50™

**Physical**

Circuits (Loaded) 40  
 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



**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

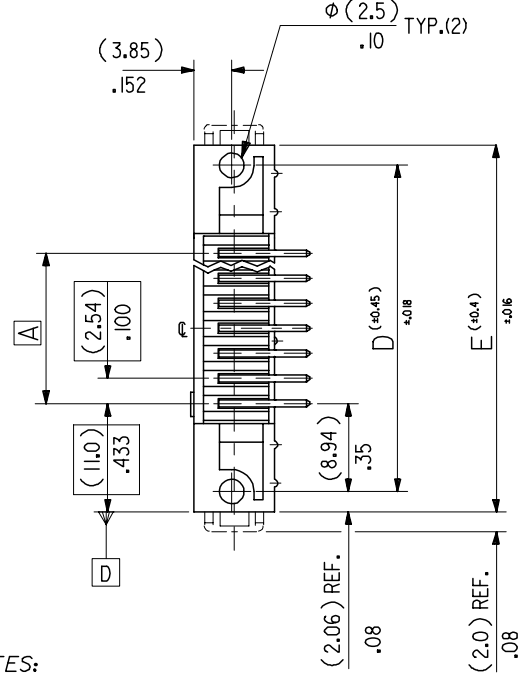
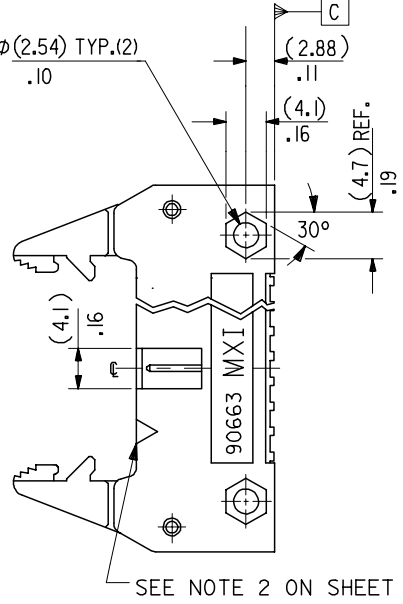
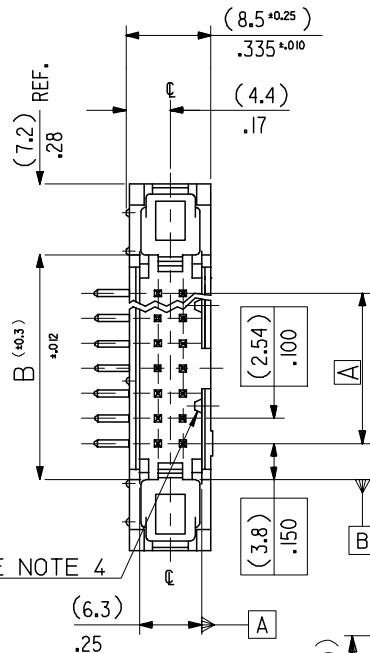
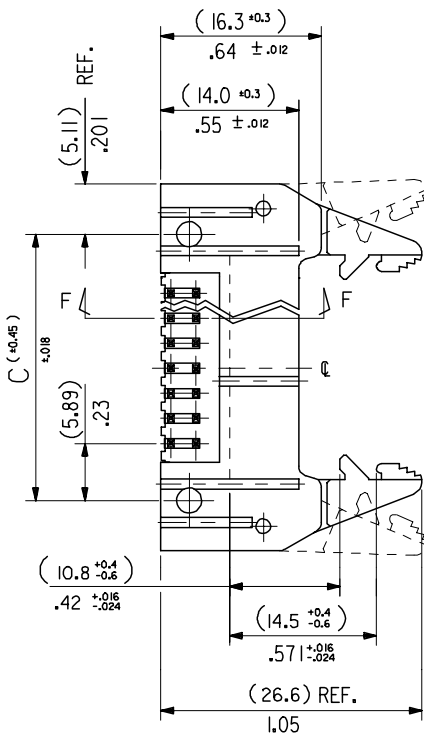
PS-99020-0015

Sales Drawing

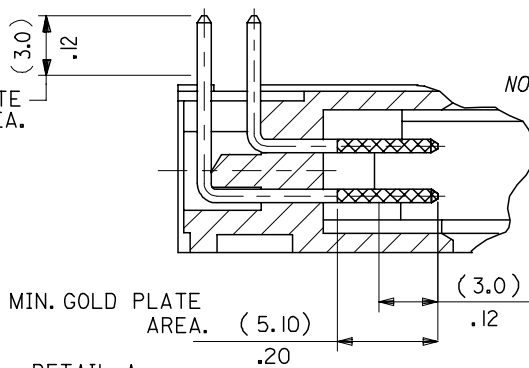
SDA-90663E

This document was generated on 04/13/2010

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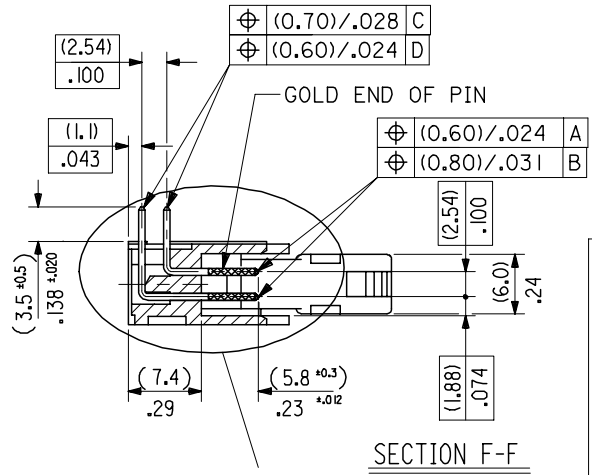


MIN. TIN PLATE AREA.



DETAIL A  
DIMENSIONS FOR SELECTIVE PLATING'S, SCALE 4:1

- NOTES:
- 1: FOR MATERIAL SPECIFICATION SEE NOTE 1 ON SHEET 4.
  - 2: FOR RECOMMENDED P.C.B. HOLE PATTERN, PART No's AND UNSTATED DIMENSIONS SEE SHEET 4.
  - 3: PRODUCT SPEC.No. : PS-99020-0015.
  - 4: THIS RIB IS NOT PRESENT ON 10 & 14 CKT PARTS
- MEASURE POINT FOR GOLD PLATING THICKNESS TYP.



ADDED SHT 9	DESCRIPTION
EC NO: E2007-0243	DRWN:DMASZKI/EMI/CZ 2007/01/10
CHKD:J.DENNEHY 2007/01/22	APPR: J.DENNEHY 2007/01/23

QUALITY SYMBOLS	▽=0
	∇=0
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm
	INCH
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	4 PLACES ± --- ± ---
	3 PLACES ± --- ± .008
	2 PLACES ± 0.20 ± .008
	1 PLACE ± 0.20 ± ---
	ANGULAR ± 2 °

DRAWN BY		DATE	
POB		1990/11/07	
CHECKED BY		DATE	
J.DENNEHY		2004/11/24	
APPROVED BY		DATE	
J.DENNEHY		2004/11/24	
MATERIAL NO.		DOCUMENT NO.	
SEE SHEET 4		SDA-90663E	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	METRIC	
TITLE		
QF50 SRD HDR RA KEY W/ELV		
MATERIAL NO.		
DOCUMENT NO.		
SHEET NO.		
3 OF 9		

MOLEX INCORPORATED

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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. GSI PLATING	ENG. NO. GS2 PLATING	ENG. NO. GS3 PLATING	ENG. NO. PRE TIN	NO.OF CKTS.

**NOTES**

**1. MATERIAL**

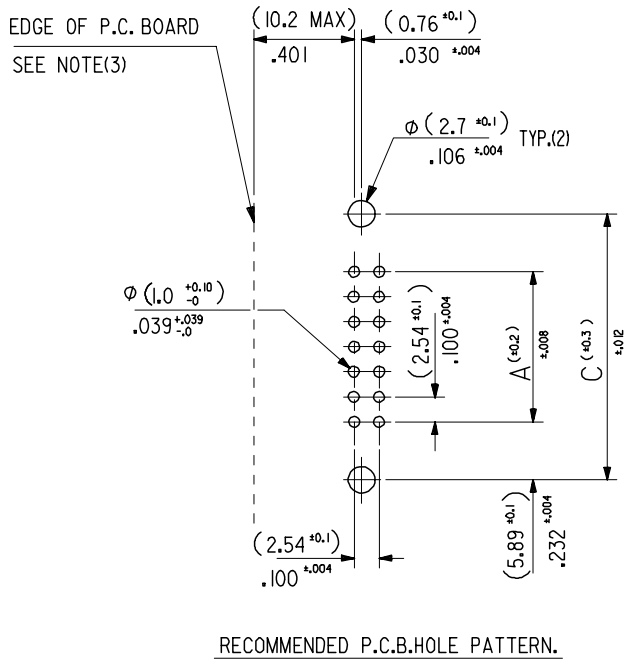
HEADER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.  
 PINS : BRASS SIZE  $\square$  (0.635)/.025 .  
 LEVER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.  
 SPRING PINS : STEEL

**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 EC NO: E2008-0129 DRWN: OBYRNES 2007/09/13 CHKD: 2007/09/13 APPR: EOMAHONY 2007/09/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla = 0$ $\triangle = 0$	mm      INCH 4 PLACES $\pm$ --- $\pm$ --- 3 PLACES $\pm$ --- $\pm .008$ 2 PLACES $\pm 0.20$ $\pm .008$ 1 PLACE $\pm 0.20$ $\pm$ --- ANGULAR $\pm 2^\circ$	MM/IN	2:1	METRIC	DRAWN BY: POB      DATE: 1990/11/07 CHECKED BY:      DATE:      TITLE: QF50 SRD HDR RA KEY W/ELV ROC:      DATE: 2000/10/04 APPROVED BY:      DATE:      MOLEX INCORPORATED MW:      DATE: 2000/10/04
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
	REV	SIZE A3	SEE CHART	SDA-90663E	4 OF 9	