

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 10 to 64 circuits
- Tin plated on solder tail
- Complies with industry-standard DIN 41651 and MIL-3 83503 keying
- Selective Gold plating options for contacts
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space
- Polarized
- Contact Molex for variations on eject levers

Reference Information

Product Specification: PS-99020-0015

Packaging: Tray

Mates With: [90635](#)

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention Force: 1.5kg (3.3 lb)

Mating Force: 350g (0.77 lb) max. per circuit

Unmating Force: 50g (0.11 lb) min. per circuit

Durability: 300 cycles max.

Physical

Housing: Black glass-filled polyester, UL 94V-0

Contact: Copper Alloy

Plating: See Table

Operating Temperature: -25 to +85°C



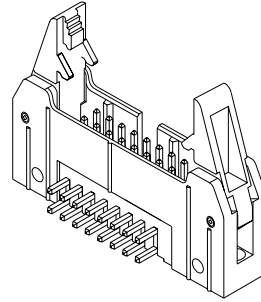
2.54mm (.100") Pitch

QF 50™

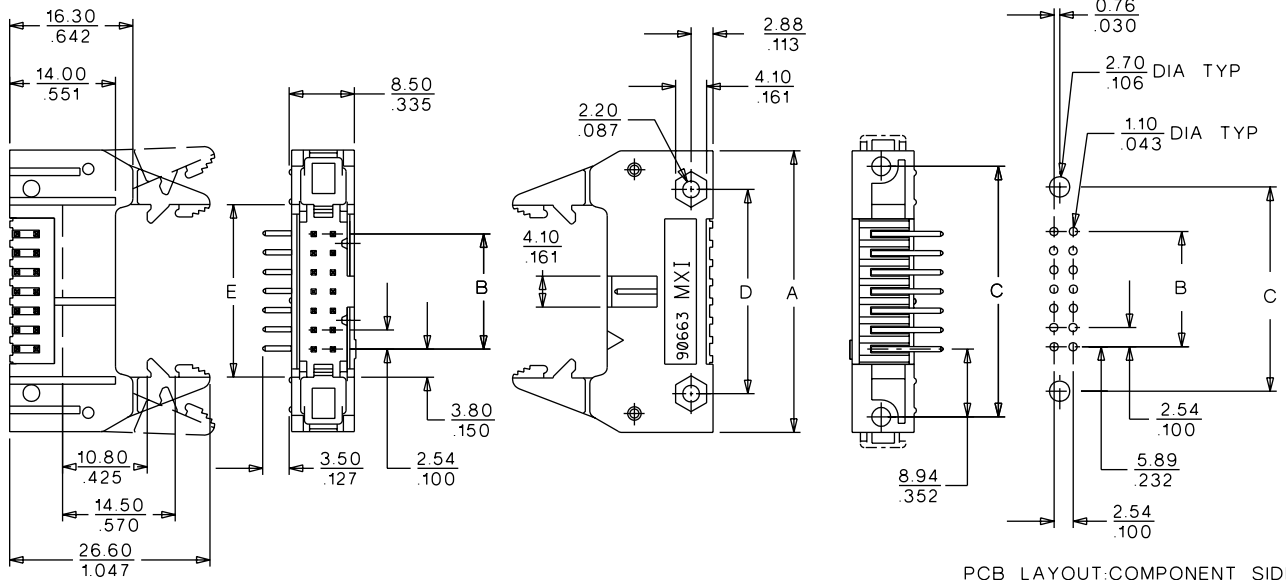
Shrouded Header

90663

Right Angle, MIL Keying With Latch/Eject Levers



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

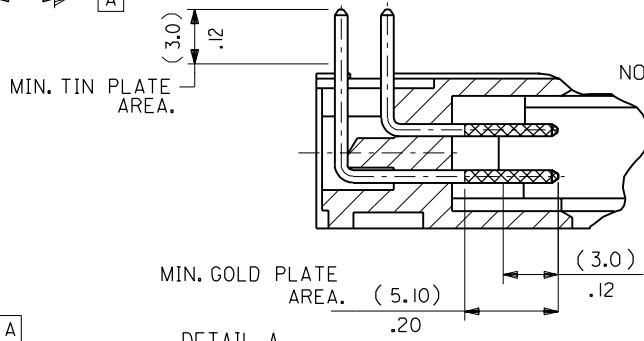
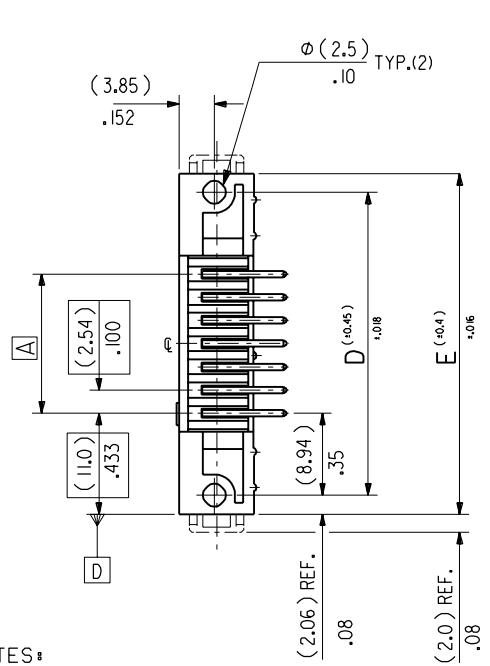
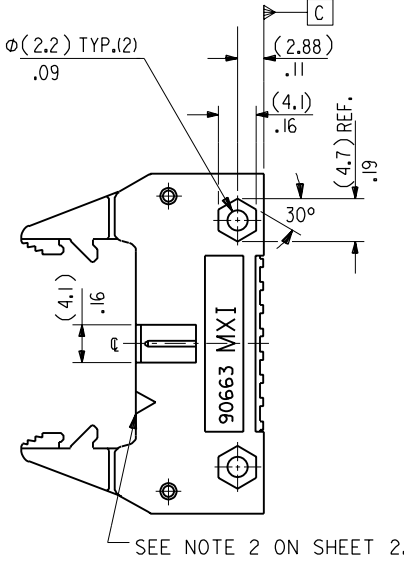
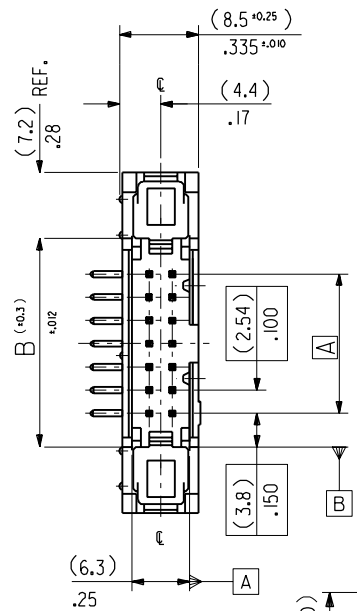
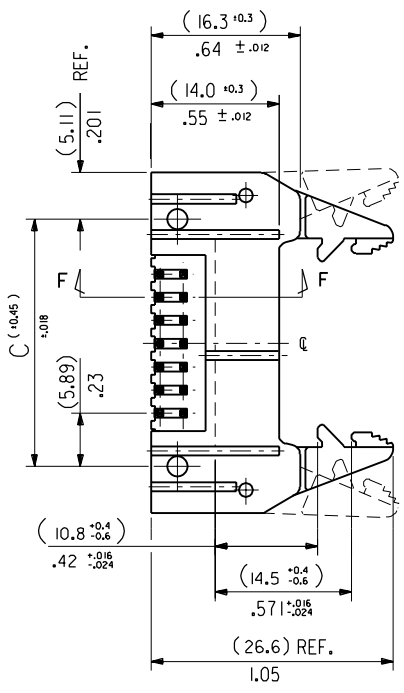
Circuits	Order No.			Dimension				
	Plating 1	Plating 2	Plating 3	A	B	C	D	E
10	90663-3101	90663-3102	90663-3103	32.16 (1.266)	10.16 (.400)	28.04 (1.104)	21.94 (.864)	17.76 (.700)
14	90663-3141	90663-3142	90663-3143	37.24 (1.466)	15.24 (.600)	33.12 (1.304)	27.02 (1.064)	22.84 (.900)
16	90663-3161	90663-3162	90663-3163	39.78 (1.566)	17.78 (.700)	35.66 (1.404)	29.56 (1.164)	25.38 (1.000)
20	90663-3201	90663-3202	90663-3203	44.86 (1.766)	22.86 (.900)	40.74 (1.604)	34.64 (1.364)	30.46 (1.200)
26	90663-3261	90663-3262	90663-3263	52.48 (2.066)	30.48 (1.200)	48.36 (1.904)	42.26 (1.664)	38.08 (1.500)
30	90663-3301	90663-3302	90663-3303	57.56 (2.266)	35.56 (1.400)	53.44 (2.104)	47.34 (1.864)	43.16 (1.700)
34	90663-3341	90663-3342	90663-3343	62.64 (2.466)	40.64 (1.600)	58.52 (2.304)	52.42 (2.064)	48.24 (1.900)
40	90663-3401	90663-3402	90663-3403	70.26 (2.766)	48.26 (1.900)	66.14 (2.604)	60.04 (2.364)	55.86 (2.200)
50	90663-3501	90663-3502	90663-3503	82.96 (3.266)	60.96 (2.400)	78.84 (3.104)	72.74 (2.864)	68.56 (2.700)
60	90663-3601	90663-3602	90663-3603	95.66 (3.766)	73.66 (2.900)	91.54 (3.604)	85.44 (3.364)	81.26 (3.200)
64	90663-3641	90663-3642	90663-3643	100.74 (3.966)	78.74 (3.100)	96.62 (3.804)	90.52 (3.564)	86.34 (3.400)

Plating 1: 4μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate

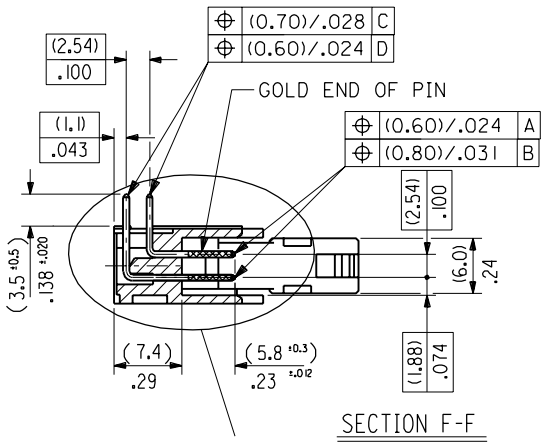
Plating 2: 30μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate

Plating 3: 10μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate

PART NO. SEE CHART
 DWG. NO. SDA-90663E



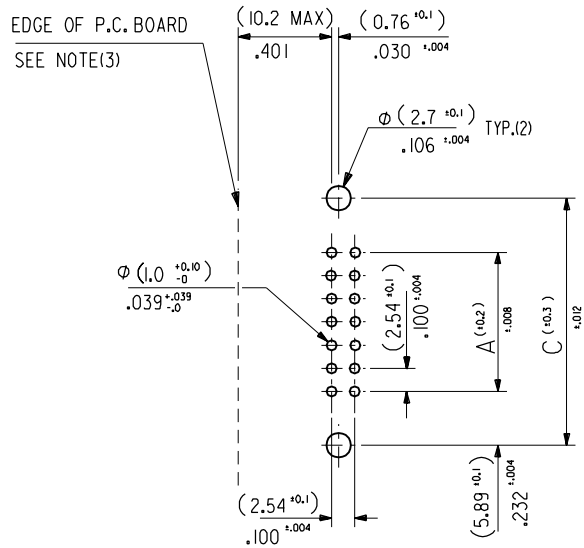
- NOTES:
- 1: FOR MATERIAL SPECIFICATION SEE NOTE 1 ON SHEET 2.
 - 2: FOR RECOMMENDED P.C.B.HOLE PATTERN, PART NO'S AND UNSTATED DIMENSIONS SEE SHEET 2.
 - 3: PRODUCT SPEC. NO. : ES 99020-0015.



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

SEE SHEET 1 EC NO. E200-0353 DRWNG:CPHEHR 00/0929 CHK'd: / / APPR: / /	DESCRIPTION MAJOR = CRITICAL = C =	QUALITY SYMBOLS		GENERAL TOLERANCES: (UNLESS SPECIFIED)		SCALE 2 : 1	DESIGN UNITS <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH	THIRD ANGLE PROJECTION	DIMENSIONS: <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH <input type="checkbox"/> mm ONLY		SHT	REV
		4 PLACES ±0. ±.	3 PLACES ±0. ±.008	2 PLACES ±0.20 ±.008	1 PLACE ±0.20 ±.	mm	INCH		DRAWN BY & DATE POB 90/11/07	CHECKED BY & DATE 90/11/07	APPROVED BY & DATE 90/11/07	CAD FILENAME sa90663x3.dwg
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				ANGULAR: ± 2°		TITLE: QF50 Srd Hdr RA Key W/ELv MOLEX INCORPORATED		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.				

(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)/1.304	(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. GS1 PLATING	ENG. NO. GS2 PLATING	ENG. NO. GS3 PLATING	ENG. NO. PRE TIN	NO.OF CKTS.



RECOMMENDED P.C.B.HOLE PATTERN.

NOTES

- MATERIAL
 HEADER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.
 PINS : BRASS SIZE P (0.635)/.025 .
 LEVER : GLASS FILLED POLYESTER (UL 94V0), COLOUR - BLACK.
 SPRING PINS : STEEL
- COLOUR IDENTIFICATION MARK FOR PLATING OPTIONS.
 90663-3**1, (1um)/.039uin MIN. NICKEL UNDERPLATE. CONTACT AREA GS1 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).
- 10.2mm MAX.TO EDGE OF PCB FOR DAISY CHAIN APPLICATIONS.

SEE SHEET 1 EC NO. E2001-0353 DRWN:CPHEHR 00/09/29 CHK: / / / APPR: / / /	QUALITY SYMBOLS MAJOR = CRITICAL =	GENERAL TOLERANCES: (UNLESS SPECIFIED)		SCALE 2 : 1	DESIGN UNITS <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH	THIRD ANGLE PROJECTION <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH	SHT	REV
		mm	INCH	DRAWN BY & DATE POB 90/11/07	TITLE: QF50 Srd Hdr RA Key W/ELv			
REV	DESCRIPTION	4 PLACES ±0. ±.	3 PLACES ±0. ±.008	2 PLACES ±0.20 ±.008	1 PLACE ±0.20 ±.	APPROVED BY & DATE MW 00/10/04	MATERIAL NO. sa90663x4.dgn	
		ANGULAR: ± 2 °		CAD FILENAME		DRAWING NO. SDA-90663E		SHEET NO. 4 OF
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.		