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Part Number: [0875520807](#)
Status: **Active**
Description: 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Through Hole, Right Angle, with Beveled Metal Pins, 0.76µm (30µ") Gold (Au) Selective Plating, 80 Circuits, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87552-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family PCB Receptacles
 Series [87552](#)
 Application Board-to-Board
 Product Name EBBI™

Physical

Circuits (Loaded) 80
 Color - Resin Black
 Durability (mating cycles max) 500
 Glow-Wire Compliant No
 Lock to Mating Part None
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 4
 Orientation Right Angle
 PC Tail Length (in) 0.110 In
 PC Tail Length (mm) 2.80 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Plating min: Mating (µin) 30.4
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 101.6
 Plating min: Termination (µm) 2.54
 Polarized to PCB Yes
 Surface Mount Compatible (SMC) Yes
 Temperature Range - Operating -55°C to +105°C
 Termination Interface: Style Through Hole

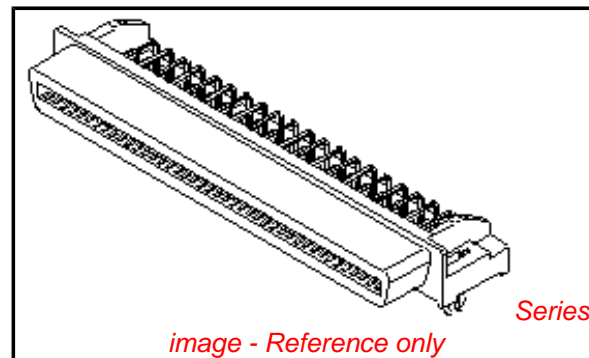
Electrical

Current - Maximum per Contact 1A
 Voltage - Maximum 30V

Solder Process Data

Duration at Max. Process Temperature (seconds) 5
 Lead-free Process Capability SMC & Wave Capable (TH only)
 Max. Cycles at Max. Process Temperature 1
 Process Temperature max. C 270

Material Info



EU RoHS

**ELV and RoHS
 Compliant**
**REACH SVHC
 Contains SVHC: No**
**Halogen-Free
 Status**
Halogen-Free

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

[87552Series](#)

Mates With

[71661](#)

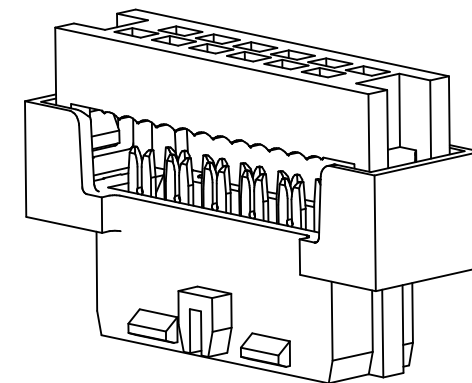
Reference - Drawing Numbers

Product Specification
Sales Drawing

PS-87552-006
SD-87552-007

This document was generated on 03/18/2010

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1. MATERIALS:
HOUSING - PBT. GLASS FILLED UL94V-0 BLACK
TERMINAL - COPPER ALLOY
2. FINISHES
PLATING 3 - 15uin (0.38um) SELECTIVE GOLD IN CONTACT AREA
AND 75uin (1.88um) TIN IN IDT AREA OVER 50uin (1.25um)
NICKEL OVERALL.
PLATING 4 - 30uin (0.76um) SELECTIVE GOLD IN CONTACT AREA
AND 75uin (1.88um) TIN IN IDT AREA OVER 50uin (1.25um)
NICKEL OVERALL.
3. PRODUCT SPEC PS-87568-004 APPLIES
4. FOR ILLUSTRATION PURPOSES, I2 CKT IS SHOWN
5. PART MATES WITH ALL MILLIGRID HEADERS WITH MATING LENGTH
BETWEEN 2.50mm AND 4.20mm
6. PART IS DESIGNED FOR 1.00mm PITCH FLAT CABLE, 7 STRANDS,
AWG #28, UL2651 AND UL2678
7. ALL OTHER CIRCUIT SIZES, CONTACT FACTORY.
8. STRAIN RELIEF TO BE PURCHASED SEPERATELY,
REFER TO SD-87569-008

ADD 32CKT OPTION EC NO: S2010-0273 DRWN:SKANG CHKD:ATSEE APPR:MLONG H1	2009/09/28	DESCRIPTION	QUALITY SYMBOLS
	2009/11/13		$\nabla_{FA}=0$
	2009/11/17		$\nabla_{FE}=0$
			$\nabla_{FI}=0$

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	\pm --- \pm ---
3 PLACES	\pm --- \pm ---
2 PLACES	± 0.15 \pm ---
1 PLACE	\pm --- \pm ---
ANGULAR $\pm 3^\circ$	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
AGARWAL	1997/08/05
CHECKED BY	DATE
SQUEK	1997/09/03
APPROVED BY	DATE
MLONG	2009/11/13
MATERIAL NO.	
SEE TABLE	
SIZE	
A3	

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
MGRID 2MM DUAL ROW IDT RECEPTACLE		
molex MOLEX INCORPORATED		SHEET NO. 1 OF 3
DOCUMENT NO. SD-87568-003		



87568-***4*
POLARIZATION ONLY
(APPLICABLE FOR 14 TO 50 CKT)



87568-***9*
POLARIZATION AND RAMP LOCKING
(APPLICABLE FOR 14 TO 50 CKT)



87568-***6*
NO POLARIZATION/RAMP FEATURE
(APPLICABLE FOR 10 TO 50 CKT)



87568-***7*
SINGLE RAMP LOCKING ONLY
(APPLICABLE FOR 10 TO 12 CKT)

ENGINEERING NUMBER	CKT. SIZE	A	B	C	D	E
87568-10**	10	16.65	8.00	14.90	11.65	10.55
87568-12**	12	18.65	10.00	16.90	13.65	12.55
87568-14**	14	20.65	12.00	18.90	15.65	14.55
87568-16**	16	22.65	14.00	20.90	17.65	16.55
87568-20**	20	26.65	18.00	24.90	21.65	20.55
87568-22**	22	28.65	20.00	26.90	23.65	22.55
87568-24**	24	30.65	22.00	28.90	25.65	24.55
87568-26**	26	32.65	24.00	30.90	27.65	26.55
87568-30**	30	36.65	28.00	34.90	31.65	30.55
87568-32**	32	38.65	30.00	36.90	33.65	32.55
87568-34**	34	40.65	32.00	38.90	35.65	34.55
87568-36**	36	42.65	34.00	40.90	37.65	36.55
87568-40**	40	46.65	38.00	44.90	41.65	40.55
87568-44**	44	50.65	42.00	48.90	45.65	44.55
87568-50**	50	56.65	48.00	54.90	51.65	50.55



- 4 - WITH POLARIZATION ONLY FOR 14 - 50 CKT
- 6 - WITHOUT POLARIZATION AND RAMP LOCKING
- 7 - WITH SINGLE RAMP LOCKING ONLY FOR 10 & 12 CKT
- 9 - WITH POLARIZATION AND RAMP LOCKING FOR 14 - 50 CKT

10-12 CIRCUIT SIZE HAS ONLY ONE RAMP FOR LOCKING (OPTIONAL)

14-50 CIRCUIT SIZE HAS BOTH POLARIZATION AND RAMP LOCKING (OPTIONAL)

ADD 32CKT OPTION EC NO: S2010-0273 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/09/28 2009/11/13 2009/11/17	QUALITY SYMBOLS FA=0 FE=0 FI=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.15 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY DRAWN BY DATE AGARWAL 1997/08/05 CHECKED BY DATE SQUEK 1997/09/03 APPROVED BY DATE MLONG 2009/11/13	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	MGRID 2MM DUAL ROW IDT RECEPTACLE MOLEX INCORPORATED
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. SD-87568-003	DOCUMENT NO. SHEET NO. 2 OF 3		
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	H1	REV	DESCRIPTION	ADD 32CKT OPTION		

F

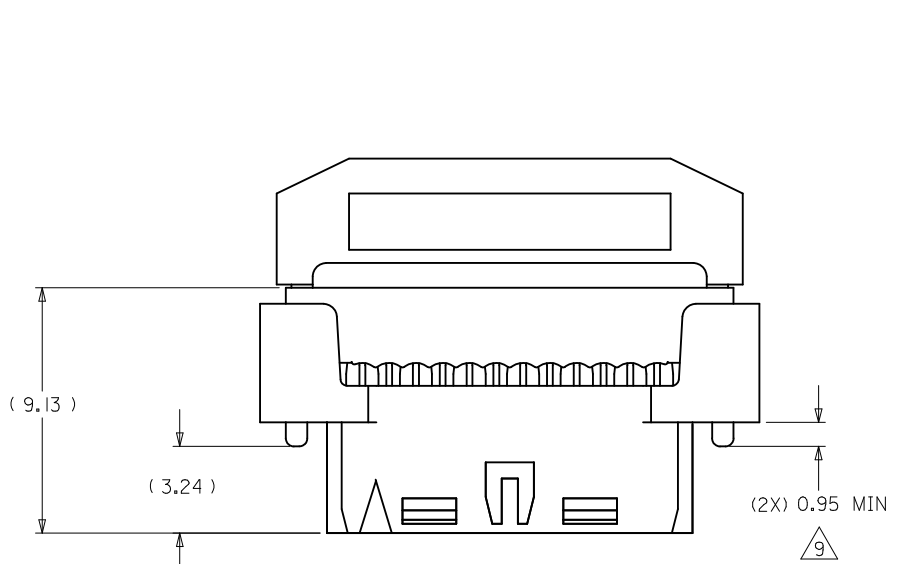
E

D

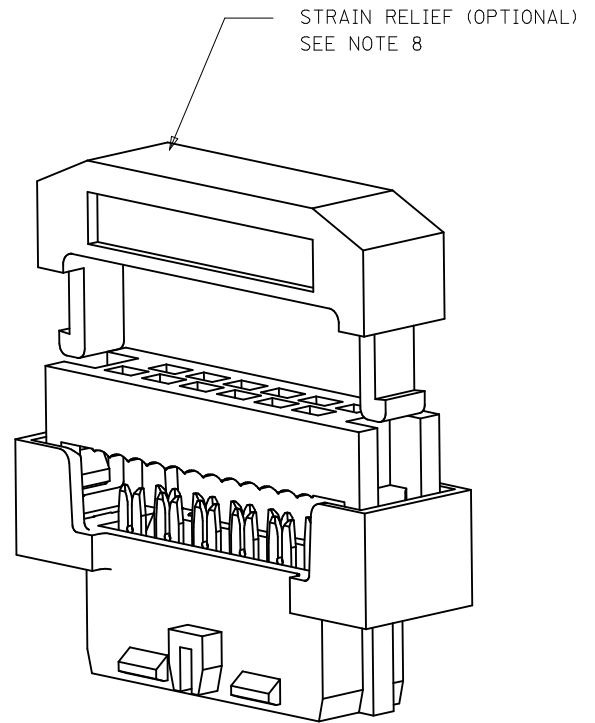
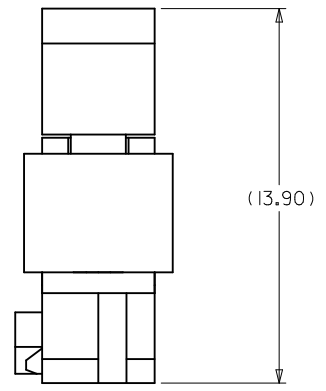
C

B

A



CABLE LOADED ASSEMBLY WITH STRAIN RELIEF



3D VIEW
(12 CKT SHOWN FOR ILLUSTRATION ONLY)

NOTES

△ THIS DIMENSION IS TO ENSURE GOOD CABLE TERMINATION.

ADD 32CKT OPTION EC NO: S2010-0273 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/09/28 2009/11/13 2009/11/17	DESCRIPTION H1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			$\nabla_A = 0$ $\nabla_E = 0$ $\nabla_F = 0$	mm	INCH	DRAWN BY AGARWAL	DATE 1997/08/05	TITLE MGRID 2MM DUAL ROW IDT RECEPTACLE MOLEX MOLEX INCORPORATED					
				4 PLACES ± ---	± ---	CHECKED BY SQUEK	DATE 1997/09/03						
				3 PLACES ± ---	± ---	APPROVED BY MLONG	DATE 2009/11/13	MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
	2 PLACES ± 0.15	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	SD-87568-003	3 OF 3						
	1 PLACE ± ---	± ---			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
			ANGULAR ± 3 °										