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Part Number: [0879813050](#)
Status: **Active**
Overview: milligrd
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Straddle Mount, Right Angle, Shrouded, Lead-free, 50 Circuits, 0.38µm (15µ") Gold (Au) Plating, Center Polarization Slot, without Cap, without PCB Locator, Metal Latch, Tube

Documents:

[3D Model](#) [Product Specification PS-87981-018 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

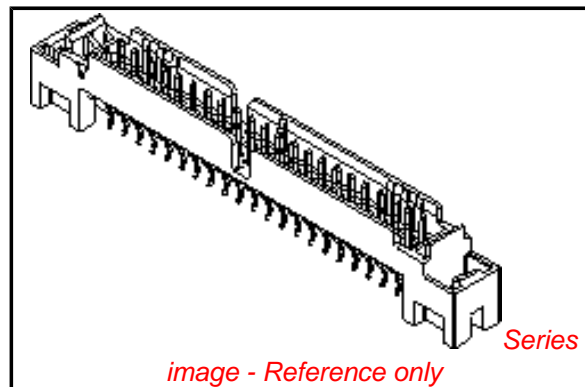
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [87981](#)
 Application Wire-to-Board
 Comments Contact Molex for application in automotive industry
 Overview [milligrd](#)
 Product Name Milli-Grid™

Physical

Breakaway No
 Circuits (Loaded) 50
 Circuits (maximum) 50
 Durability (mating cycles max) 30
 First Mate / Last Break No
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part No
 Keying to Mating Part None
 Lock to Mating Part Yes
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Number of Rows 2
 Orientation Right Angle
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tube
 Pitch - Mating Interface (in) 0.079 In
 Pitch - Mating Interface (mm) 2.00 mm
 Plating min: Mating (µin) 15.2
 Plating min: Mating (µm) 0.38
 Plating min: Termination (µin) 101.6
 Plating min: Termination (µm) 2.54
 Polarized to Mating Part Center Slot
 Polarized to PCB Yes
 Shrouded Fully
 Stackable No
 Temperature Range - Operating -40°C to +85°C
 Termination Interface: Style Straddle Mount



EU RoHS

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

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

[87981Series](#)

Mates With

[87985](#) Milli-Grid™ 2mm IDT Receptacle with Metal Latch

Electrical

Current - Maximum per Contact	2A
Voltage - Maximum	125V

Solder Process Data

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info**Reference - Drawing Numbers**

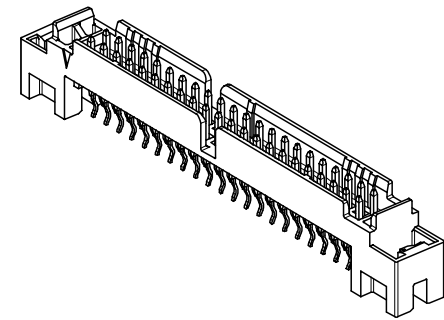
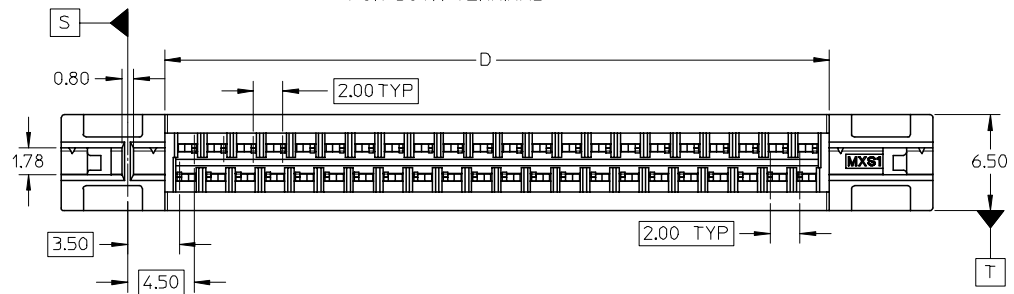
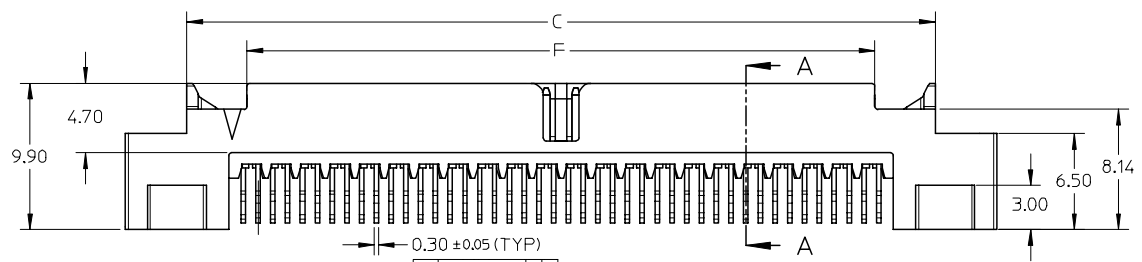
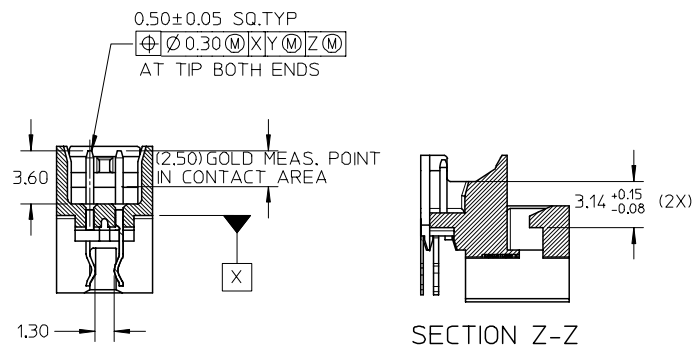
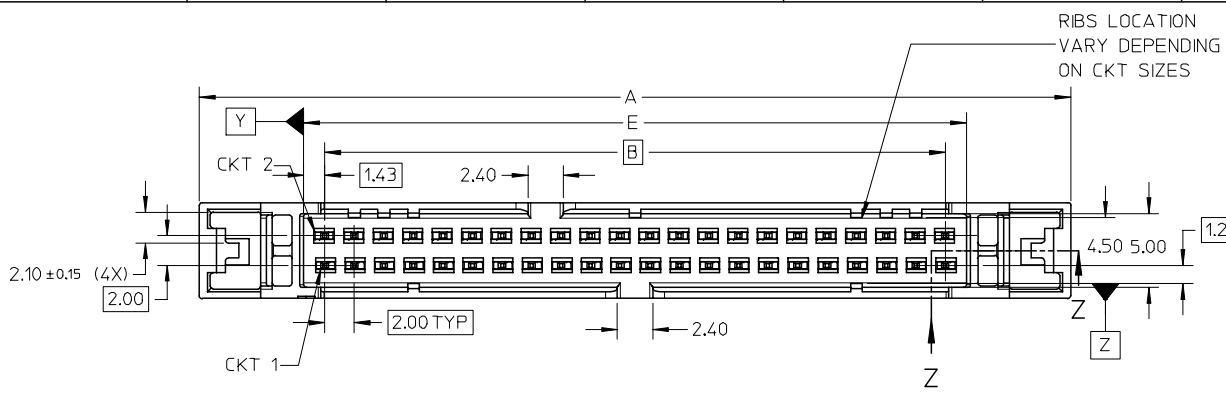
Product Specification	PS-87981-018
Sales Drawing	SD-87981-012

This document was generated on 05/26/2010

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PART NUMBER	CKT SIZE	DIMENSION						
		A	B	C	D	E	F	G
87981-3044	44	59.00	42.00	50.65	45.00	44.85	42.50	42.00
87981-3050	50	65.00	48.00	56.65	51.00	50.85	48.50	48.00



- NOTES:
- MATERIAL :
HOUSING : LCP, GLASS FILLED UL94V-0, COLOR BLACK.
PIN : PHOSPHOR BRONZE.
 - PLATING:
0.38µM GOLD IN CONTACT AREA AND 2.54µM MIN. TIN IN SOLDER TAIL AREA OVER 1.27µM MIN. NICKEL OVERALL.
 - FOR ILLUSTRATION PURPOSES, 44 CKT. SIZE WAFER IS SHOWN.
 - THIS IS A LEAD FREE PRODUCT.
 - PRODUCT SPECIFICATION : PS-87981-018
 - PRODUCTS ARE PACKED IN TUBE.
 - PRODUCTS ARE MATED WITH : 87985 SERIES.

EC NO: S2006-0516 DRWN: YLQ1A0 CHKD: BOKOK APPR: PTLIM	2005/11/23 2005/11/24 2005/11/25	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
				DRAWN BY YLQ1A0	DATE 2005/06/30	TITLE MGRID, SHROUDED HEADER STRADDLE MOUNT W/EMBOSSED M/LATCH SLOT	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY PTLIM	DATE 2005/07/13	MOLEX INCORPORATED	SHEET NO. 1 OF 2
A1				MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87981-012	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

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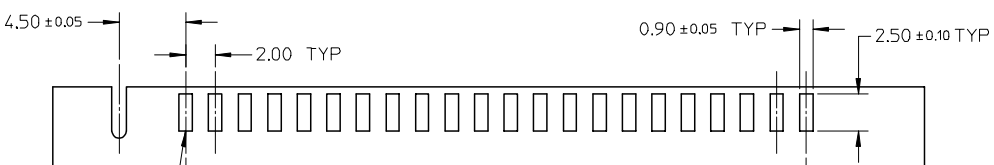
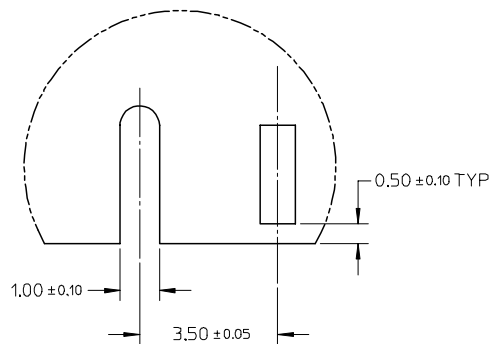
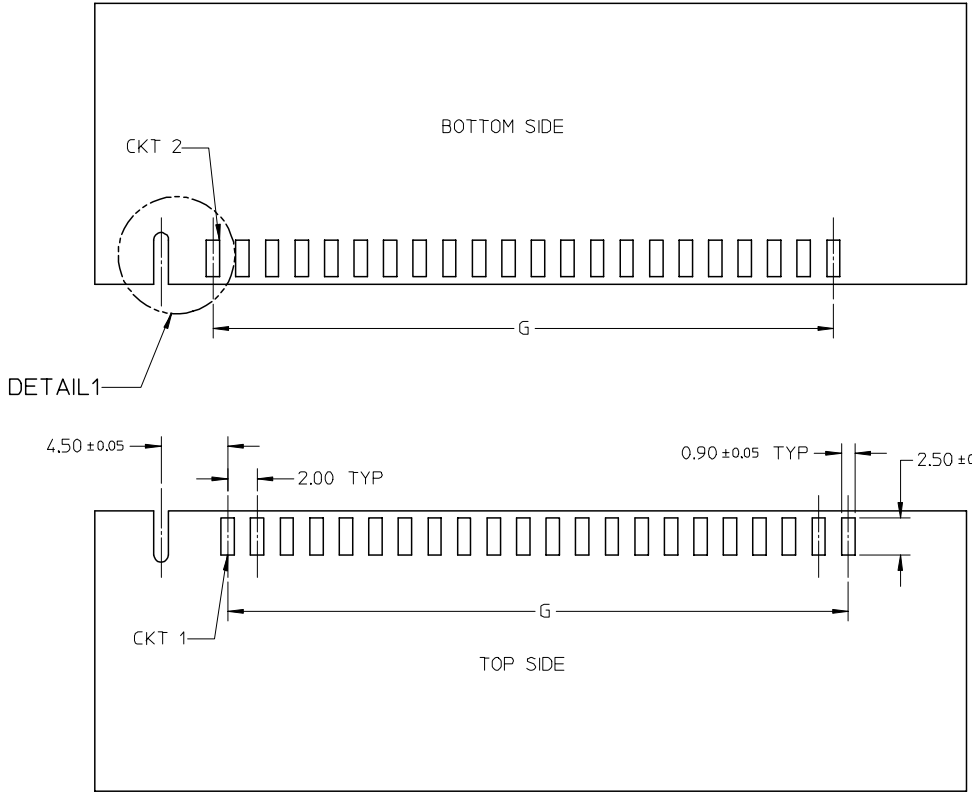
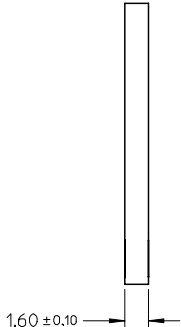
E

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RECOMMENDED P.C.B. LAYOUT

EC NO: S2006-0516 DRWN: YLQ1A0 2005/11/23 CHKD: BOKOK 2005/11/24 APPR: PTLIM 2005/11/25	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE MGRID, SHROUDED HEADER STRADDLE MOUNT W/EMBOSSSED M/LATCH SLOT			
		4 PLACES	± ---	± ---	YLQ1A0	2005/06/30				
					CHECKED BY	DATE	MOLEX INCORPORATED			
3 PLACES	± ---	± ---	BOKOK	2005/07/13						
			APPROVED BY	DATE	MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
2 PLACES	± 0.2	± ---	PTLIM	2005/07/13	SEE TABLE		SD-87981-012		2 OF 2	
1 PLACE	± ---	± ---			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
					SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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