

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0879823044](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Through Hole, Vertical, Shrouded, Lead-free, 44 Circuits, 0.38µm (15µ") Gold (Au) Plating, Center Polarization Slot, without Cap, PCB Locator, Metal Latch, Tube

Documents:

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

Agency Certification

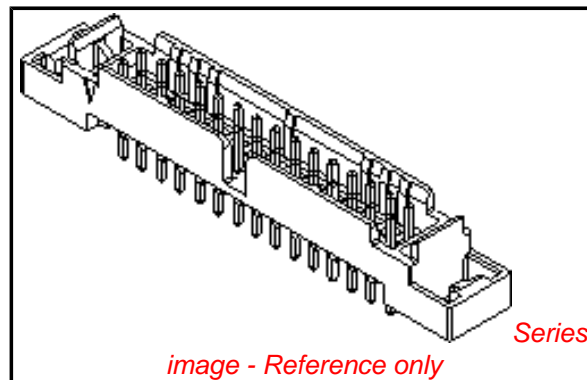
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [87982](#)
 Application Wire-to-Board
 Comments Contact Molex for application in automotive industry
 Overview [milligrid](#)
 Product Name Milli-Grid™

Physical

Breakaway No
 Circuits (Loaded) 44
 Circuits (maximum) 44
 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 Brass, Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.114 In
 PC Tail Length (mm) 2.90 mm
 PCB Locator Yes
 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) 76.4
 Plating min: Termination (µm) 1.91
 Polarized to Mating Part Center Slot
 Polarized to PCB Yes
 Shrouded Fully
 Stackable No



EU RoHS

ELV and RoHS Compliant

REACH SVHC Contains SVHC: No Halogen-Free Status

Not Halogen-Free

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.

China RoHS



Search Parts in this Series

[87982Series](#)

Mates With

[87369 Crimp Housing](#)

Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Through Hole

Electrical

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

Solder Process Data

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

Material Info

Reference - Drawing Numbers

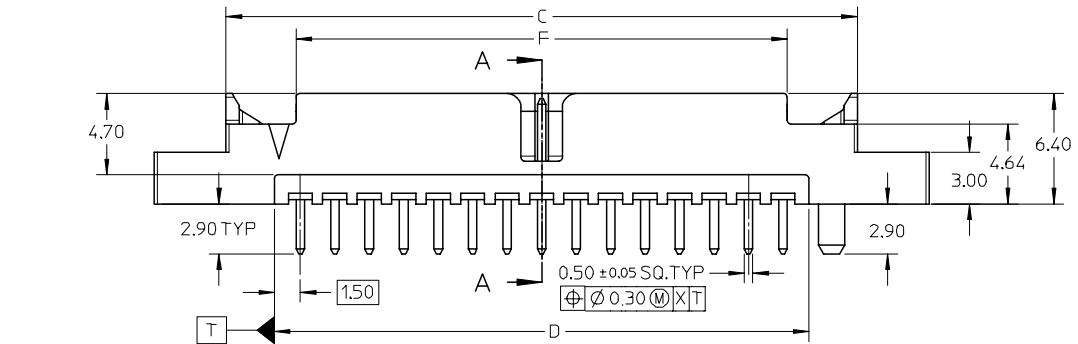
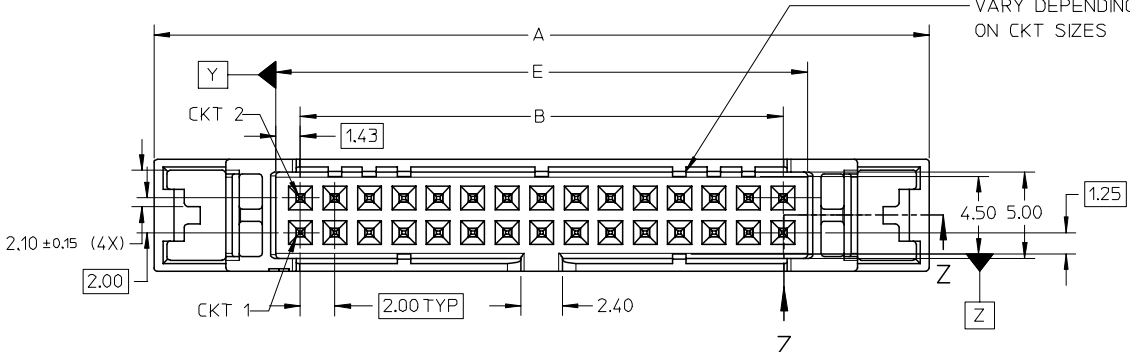
Packaging Specification	PK-87982-001
Product Specification	PS-87981-018
Sales Drawing	SD-87982-009

This document was generated on 05/26/2010

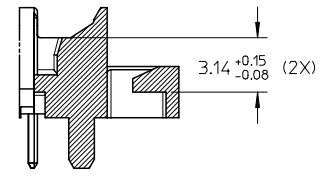
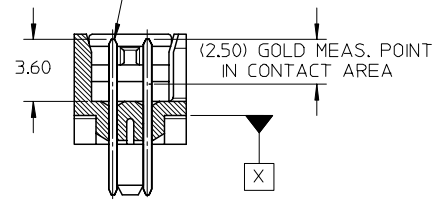
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10 9 8 7 6 5 4 3 2 1

PART NUMBER	CKT SIZE	DIMENSION					
		A	B	C	D	E	F
87982-3030	30	45.00	28.00	36.65	31.00	30.85	28.50
87982-3040	40	55.00	38.00	46.65	41.00	40.85	38.50
87982-3044	44	59.00	42.00	50.65	45.00	44.85	42.50
87982-3050	50	65.00	48.00	56.65	51.00	50.85	48.50

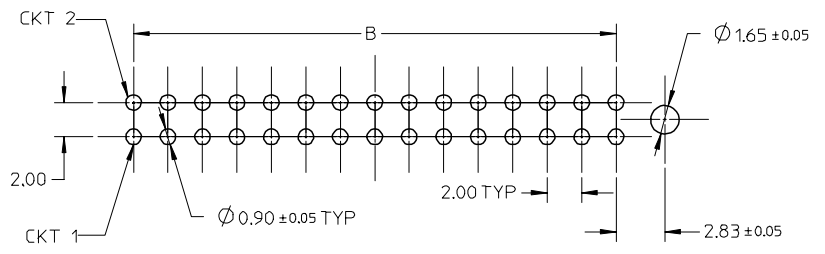
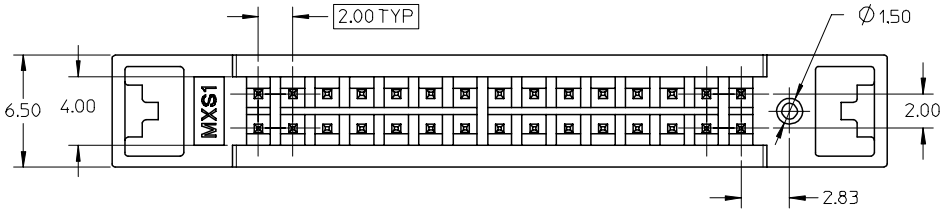


0.50 ± 0.05 SQ. TYP
 $\Phi \varnothing 0.30 \text{ (M) X | Y (M) Z (M)}$
 AT TIPS BOTH ENDS



SECTION A-A

SECTION Z-Z



RECOMMENDED PCB LAYOUT

- NOTES:
- MATERIAL : HOUSING : PA, GLASS FILLED, UL94V-0, COLOR BLACK. PIN : PHOSPHOR BRONZE.
 - PLATING: 0.38μM GOLD IN CONTACT AREA AND 1.88μM MIN. TIN IN SOLDER TAIL AREA OVER 1.27μM MIN. NICKEL OVERALL.
 - FOR ILLUSTRATION PURPOSE, 30 CIRCUIT 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.
 - PRODUCTS SHALL BE PACKED IN MOISTURE BARRIER BAG.

ADD NOTE 8.
 EC NO: S2008-0429
 DRWNS:KANG
 CHKD:ATSEE
 APPR:MLONG

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.2	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
YIQ1A0	2005/06/30
CHECKED BY	DATE
BOKOK	2005/07/13
APPROVED BY	DATE
PTL IM	2005/07/13
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
MGRID, SHROUDED HEADER VERTICAL W/EMBOSSED M/LATCH SLOT		
MOLEX INCORPORATED		
DOCUMENT NO.		SHEET NO.
SD-87982-009		1 OF 1

9 8 7 6 5 4 3 2 1