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Part Number: [0877602218](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Through Hole, 22 Circuits, 2.54µm (100µ) Tin (Sn) Plating, Tray, Lead-free

Documents:

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [87760](#)
 Application Board-to-Board, Wire-to-Board
 Comments Lead-free version of 87049 series
 Overview [milligrid](#)
 Product Name Milli-Grid™

Physical

Breakaway No
 Circuits (Loaded) 22
 Circuits (maximum) 22
 Color - Resin Black
 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 None
 Mated Height (in) 0.157 In
 Mated Height (mm) 4.00 mm
 Material - Metal Phosphor Bronze
 Material - Plating Mating Tin
 Material - Plating Termination Nickel
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Right Angle
 PC Tail Length (in) 0.102 In
 PC Tail Length (mm) 2.60 mm
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.079 In
 Pitch - Mating Interface (mm) 2.00 mm
 Pitch - Term. Interface (in) 0.079 In
 Pitch - Term. Interface (mm) 2.00 mm
 Plating min: Mating (µin) 101.6
 Plating min: Mating (µm) 2.54
 Plating min: Termination (µin) 50
 Plating min: Termination (µm) 1.27



image - Reference only

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
 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

[87760Series](#)

Mates With

[79107](#) Milli-Grid™ Receptacle, Vertical, Through Hole. [79108](#) Milli-Grid™ Flex-to-Board, Vertical Receptacle. Milli-Grid™ Receptacle, Surface Mount. [79109](#). [87381](#)

Polarized to Mating Part	No
Polarized to PCB	No
Shrouded	No
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Through Hole

Electrical

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

Solder Process Data

Duration at Max. Process Temperature (seconds)	14
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	265

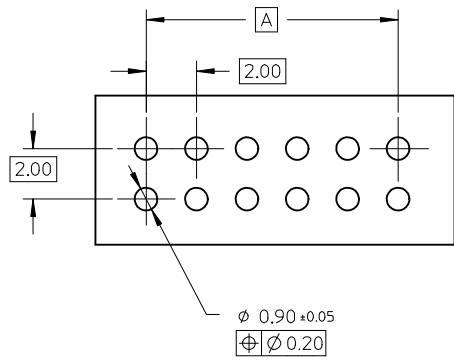
Material Info

Reference - Drawing Numbers

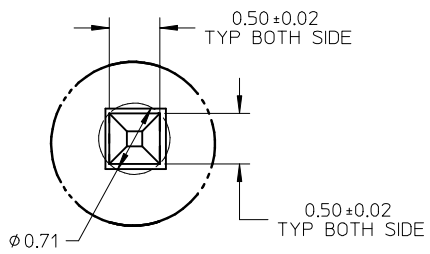
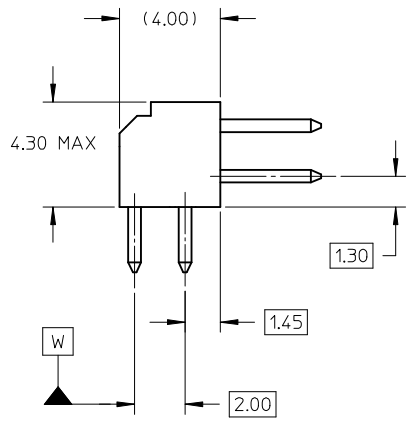
Sales Drawing	SD-87760-109
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This document was generated on 05/26/2010

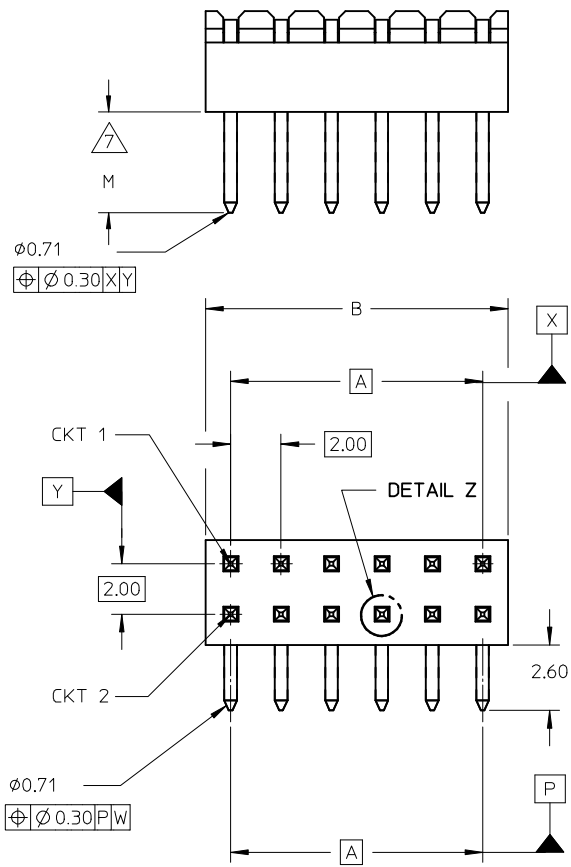
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RECOMMENDED PCB LAYOUT



DETAIL Z



- NOTES:
- MATERIAL:
 - HSG: PCT, 30% GLASS FILLED, UL 94V-0, COLOUR BLACK.
 - PIN: 0.50MM SQ PHOSPHOR BRONZE 510
 - PLATING:
 - ***6 - 0.38um MIN GOLD IN CONTACT AREA, 1.90um MIN TIN IN SOLDER TAIL AREA, BOTH OVER 1.27um MIN NICKEL OVERALL
 - ***7 - 0.76um MIN GOLD IN CONTACT AREA, 1.90um MIN TIN IN SOLDER TAIL AREA, BOTH OVER 1.27um MIN NICKEL OVERALL
 - ***8 - 2.54um MIN TIN OVER 1.27um MIN NICKEL OVERALL
 - 12 CKT USED FOR ILLUSTRATION ONLY
 - PART TO BE PACKED IN POCKET TRAY/TUBE (SEE TABLE).
 - PRODUCT SPEC PS-87761-100 APPLIES.
 - RECOMMENDED PCB BOARD THK 1.60±0.10 MM.
- MATING LENGTH:
- | | |
|---|--------|
| 1 | 4.00MM |
| 2 | 3.50MM |
| 3 | 3.06MM |
| 4 | 5.75MM |

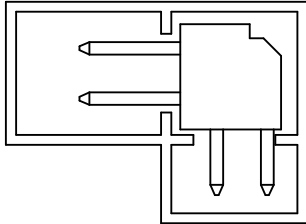
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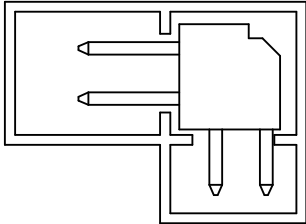
87760 - * * * *

(SEE SHT 3) →

- PLATING OPTION (SEE NOTE 2)
- MATING OPTION

0047-DW-SIRIUS EC NO: S2010-0177 DRWN:SKANG CHKD:ATSEE APPR:MLONG	2009/10/21 2009/10/22 2009/10/23	QUALITY SYMBOLS ▽=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KSEE	DATE 2003/10/15	TITLE MGRID, 2MM DUAL ROW HDR. R/A			
A11	DESCRIPTION		4 PLACES	± ---	± ---	CHECKED BY KCL ING	DATE 2003/12/02	MOLEX INCORPORATED		
			3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2003/12/11			
			2 PLACES	± 0.2	± ---	MATERIAL NO.	DOCUMENT NO.	SD-87760-109		SHEET NO.
			1 PLACE	± ---	± ---	SEE TABLE		1 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

	10	9	8	7	6	5	4	3	2	1	
	PART NUMBER	VOID PIN LOCATION	CKT SIZE	A	B	M	PACKAGING TYPE				
F	87760-04**	-	04	2.00	4.00	REFER TO NOTE 7.	TRAY		PART IN TUBE		
	87760-06**	-	06	4.00	6.00						
	87760-08**	-	08	6.00	8.00						
	87760-10**	-	10	8.00	10.00						
	87760-12**	-	12	10.00	12.00						
	87760-14**	-	14	12.00	14.00						
	87760-16**	-	16	14.00	16.00						
E	87760-18**	-	18	16.00	18.00						
	87760-20**	-	20	18.00	20.00						
	87760-22**	-	22	20.00	22.00						
	87760-24**	-	24	22.00	24.00						
	87760-26**	-	26	24.00	26.00						
	87760-28**	-	28	26.00	28.00						
D	87760-30**	-	30	28.00	30.00						
	87760-32**	-	32	30.00	32.00						
	87760-34**	-	34	32.00	34.00						
	87760-36**	-	36	34.00	36.00						
	87760-38**	-	38	36.00	38.00						
	87760-40**	-	40	38.00	40.00						
C	87760-42**	-	42	40.00	42.00						
	87760-44**	-	44	42.00	44.00						
	87760-46**	-	46	44.00	46.00						
	87760-48**	-	48	46.00	48.00						
	87760-50**	-	50	48.00	50.00						
	87760-5116	5, 6 & 26	50	48.00	50.00						
B	87760-5248	-	28	26.00	28.00	TUBE					



PART IN TUBE

0047-DW-SIRIUS EC NO: S2010-0177 DRWN:SKANG 2009/10/21 CHKD:ATSEE 2009/10/22 APPR:MLONG 2009/10/23	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$\nabla=0$ $\square=0$	mm INCH	MM ONLY	NTS	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± ---	DRAWN BY: KSEE DATE: 2003/10/15 CHECKED BY: DATE: APPROVED BY: DATE: 2003/12/02 SKTOH 2003/12/11	TITLE		MGRID, 2MM DUAL ROW HDR. R/A		
		ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	MOLEX INCORPORATED DOCUMENT NO. SD-87760-109	SHEET NO. 2 OF 2			