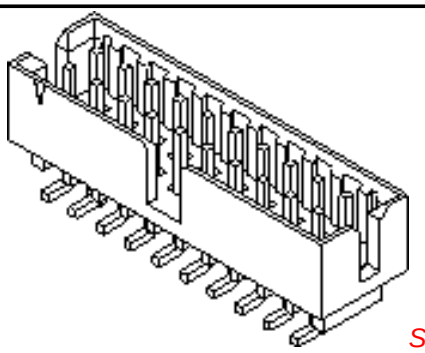
This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878320820
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 8 Circuits, 0.38µm (15µ") Gold (Au) Plating, without Locking Window, with Centre Polarization Slot, PCB Locator, Tube



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-87831-027 (PDF)
- RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	87832
Application	Wire-to-Board
Comments	Contact Molex for application in automotive industry
Overview	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	No
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Black
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	Yes
Lock to Mating Part	No
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
PCB Locator	Yes
PCB Retention	None
Packaging Type	Tube
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)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.88
Polarized to Mating Part	Side Slots (2)
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +105°C

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not 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
87832Series

Mates With
50394 Wire-to-Board Terminals. 51110 Wire-to-Board Crimp Housing. 87568 Wire-to-Board IDT Housings. 79107 Board-to-Board Top Entry Through Hole Receptacle. 79108 Board-to-Board FFC/FPC Top Entry Through Hole Receptacle. L

Termination Interface: Style	Surface Mount

Electrical

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

Solder Process Data

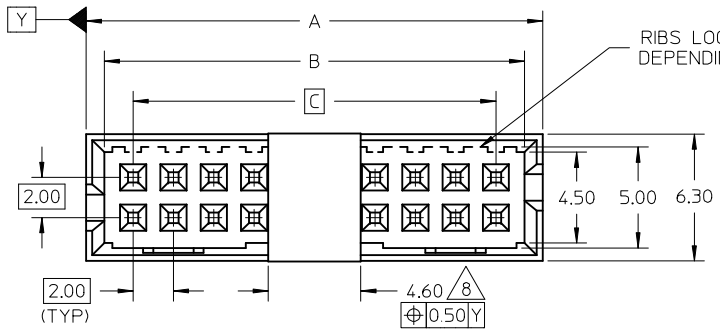
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

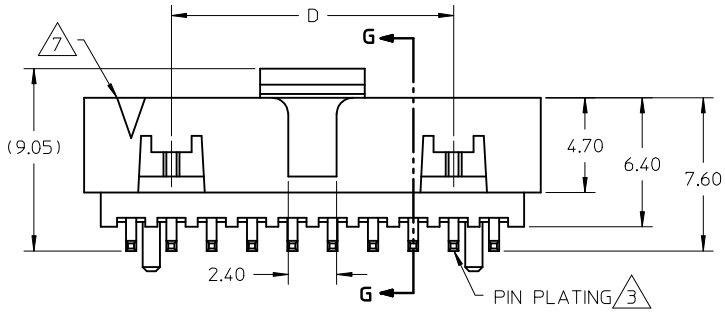
Material Info

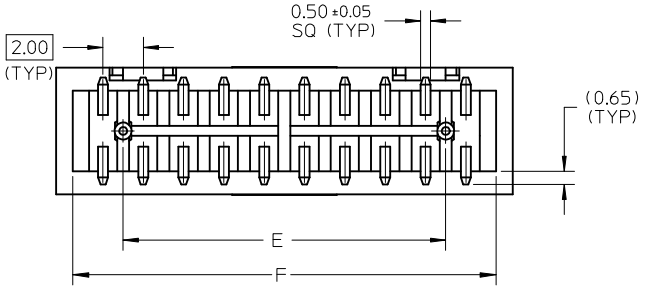
Reference - Drawing Numbers

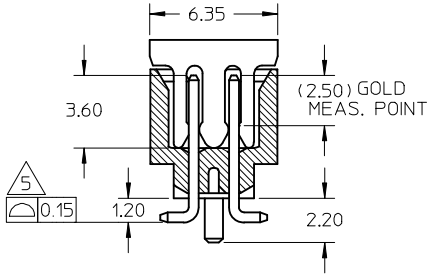
Product Specification	PS-87831-027
Sales Drawing	SD-87832-006

This document was generated on 05/25/2010
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

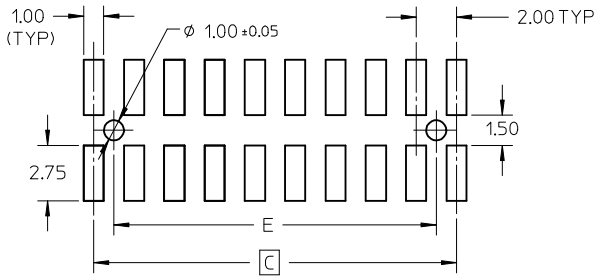








SECTION G-G



RECOMMENDED PCB PATTERN

CKT SIZE	A	B	C	D	E	F
4	6.65	4.85	2.00	------	------	5.00
6	8.65	6.85	4.00	------	2.00	7.00
8	10.65	8.85	6.00	------	4.00	9.00
10	12.65	10.85	8.00	------	6.00	11.00
12	14.65	12.85	10.00	------	8.00	13.00
14	16.65	14.85	12.00	8.00	10.00	15.00
16	18.65	16.85	14.00	10.00	12.00	17.00
18	20.65	18.85	16.00	12.00	14.00	19.00
20	22.65	20.85	18.00	14.00	16.00	21.00
22	24.65	22.85	20.00	16.00	18.00	23.00
24	26.65	24.85	22.00	18.00	20.00	25.00
26	28.65	26.85	24.00	20.00	22.00	27.00
28	30.65	28.85	26.00	22.00	24.00	29.00
30	32.65	30.85	28.00	24.00	26.00	31.00
32	34.65	32.85	30.00	26.00	28.00	33.00
34	36.65	34.85	32.00	28.00	30.00	35.00
36	38.65	36.85	34.00	30.00	32.00	37.00
38	40.65	38.85	36.00	32.00	34.00	39.00
40	42.65	40.85	38.00	34.00	36.00	41.00
42	44.65	42.85	40.00	36.00	38.00	43.00
44	46.65	44.85	42.00	38.00	40.00	45.00
46	48.65	46.85	44.00	40.00	42.00	47.00
48	50.65	48.85	46.00	42.00	44.00	49.00
50	52.65	50.85	48.00	44.00	46.00	51.00

NOTES:
1. FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING & CAP : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
3. PLATING : 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN.NICKEL OVERALL.
4. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
5. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
6. NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
7. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
8. POSITION OF CAP TO BE LOCATED AT CENTER OF DIMENSION 'A' REGARDLESS OF CIRCUIT SIZE.
9. TOP SURFACE OF CAP TO BE FLAT FOR THE PURPOSE OF PICK-&-PLACE BY VACUUM SUCTION NOZZLE.
10. THIS HEADER MATES WITH MOLEX:
    a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
    b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
11. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
12. PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.

ADD ILLUSTRATION
EC NO: S2009-0556 2009/02/23
DRWN:SKANG 2009/02/23
CH'KD:ATSEE 2009/02/23
APPR:MLONG 2009/02/23
DESCRIPTION
A9
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: ATSEE DATE: 2003/10/14
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07
MATERIAL NO.: SEE TABLE

TITLE: MGRID, SHROUDED HEADER SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R

MOLEX INCORPORATED

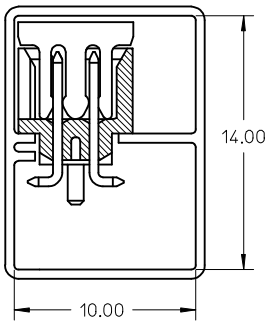
DOCUMENT NO.: SD-87832-006
SHEET NO.: 1 OF 4

SIZE A3

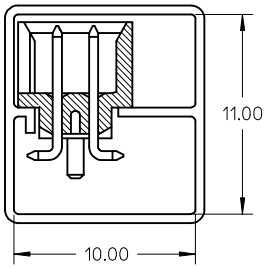
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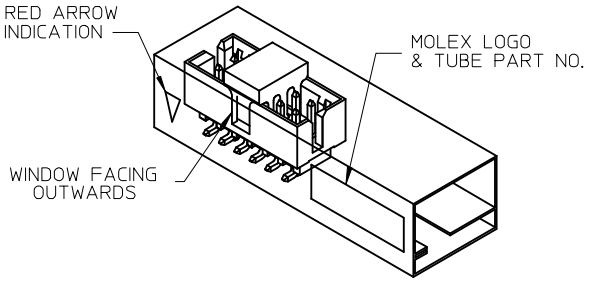
TUBE PACKAGING

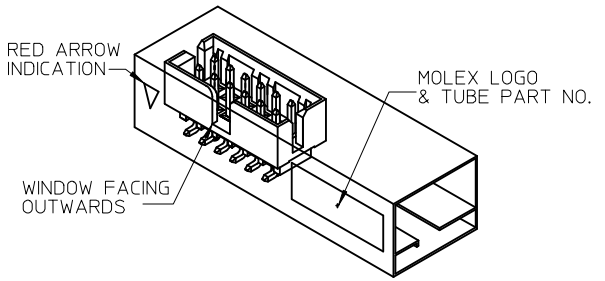
WITH CAP IN TUBE



WITHOUT CAP IN TUBE







REF : ORIENTATION OF PART IN TUBE

(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)

ADD ILLUSTRATION
EC NO: S2009-0556 2009/02/23
DRWN:SKANG 2009/02/23
CH'KD:ATSEE 2009/02/23
APPR:MLONG 2009/02/23
DESCRIPTION
REV

A9

QUALITY SYMBOLS
▼=0
Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: ATSEE DATE: 2003/10/14
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07

TITLE: MGRID, SHROUDED HEADER SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R

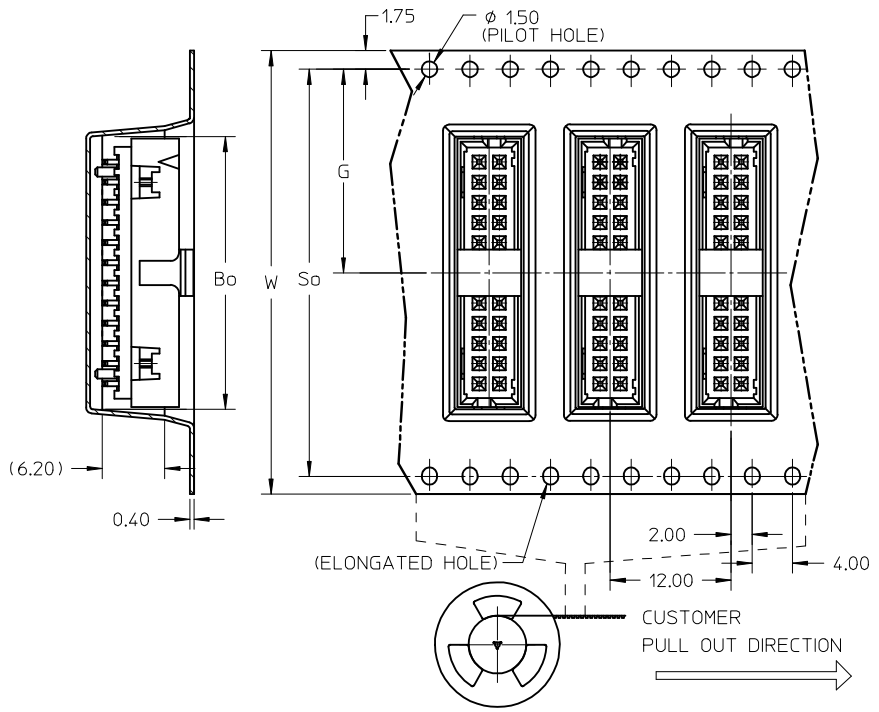
MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-006
SHEET NO.: 2 OF 4
SIZE: A3

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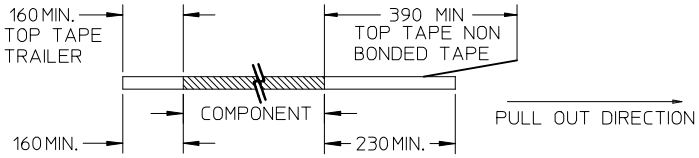
EMBOSSED CARRIER TAPE LAYOUT

24 CKT USE FOR ILLUSTRATION ONLY

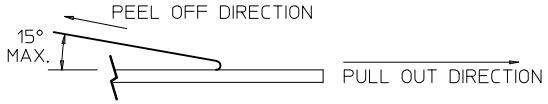


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
   (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



3. PACKAGING STANDARD IS AS PER EIA-481.

REV	DESCRIPTION	DATE
A9	ADD ILLUSTRATION EC NO: S2009-0556 DRWN:SKANG CH'KD:ATSEE APPR:MLONG	2009/02/23 2009/02/23 2009/02/23

QUALITY SYMBOLS
▼=0
Ⓒ=0

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

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM ONLY
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	ATSEE
DATE	2003/10/14
CHECKED BY	KCLING
DATE	2003/11/07
APPROVED BY	SKTOH
DATE	2003/11/07
MATERIAL NO.	SEE TABLE
TITLE	MGRID, SHROUDED HEADER SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R
	MOLEX INCORPORATED
DOCUMENT NO.	SD-87832-006
SHEET NO.	3 OF 4
SIZE	A3

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PLS REFER TO PART 87832-**08 FOR CENTER LOCKING SLOT OPTION.

PEG OPTION	P/N W/O CAP IN TUBE	P/N W/CAP IN TUBE	P/N W/CAP IN TAPE & REEL	CKT SIZE	DIMENSION					
					W	G	Bo	So	Ao	Ko
NO	87832-0420	87832-0422	87832-5122	4	16.00	7.50	7.15	------	6.40	9.30
YES	87832-0620	87832-0622	87832-5222	6	24.00	11.50	9.15	------	6.40	9.30
YES	87832-0820	87832-0822	87832-5322	8	24.00	11.50	11.05	------	6.40	9.30
YES	87832-1020	87832-1022	87832-5422	10	24.00	11.50	13.05	------	6.40	9.30
YES	87832-1220	87832-1222	87832-5522	12	32.00	14.20	15.15	28.40	6.85	9.30
YES	87832-1420	87832-1422	87832-5622	14	32.00	14.20	17.05	28.40	6.40	9.30
YES	87832-1620	87832-1622	87832-5722	16	32.00	14.20	19.05	28.40	6.40	9.30
YES	87832-1820	87832-1822	87832-5822	18	44.00	20.20	21.05	40.40	6.40	9.30
YES	87832-2020	87832-2022	87832-5922	20	44.00	20.20	23.05	40.40	6.40	9.30
YES	87832-2220	87832-2222	87832-6022	22	44.00	20.20	25.05	40.40	6.40	9.30
YES	87832-2420	87832-2422	87832-6122	24	44.00	20.20	27.05	40.40	6.40	9.30
YES	87832-2620	87832-2622	87832-6222	26	44.00	20.20	29.05	40.40	6.40	9.30
YES	87832-2820	87832-2822	87832-6322	28	56.00	26.20	31.05	52.40	6.40	9.30
YES	87832-3020	87832-3022	87832-6422	30	56.00	26.20	33.05	52.40	6.40	9.30
YES	87832-3220	87832-3222	------	32	------	------	------	------	------	------
YES	87832-3420	87832-3422	87832-6622	34	56.00	26.20	37.05	52.40	6.40	9.30
YES	87832-3620	87832-3622	------	36	------	------	------	------	------	------
YES	87832-3820	87832-3822	------	38	------	------	------	------	------	------
YES	87832-4020	87832-4022	87832-6922	40	56.00	26.20	43.05	52.40	6.40	9.30
YES	87832-4220	87832-4222	------	42	------	------	------	------	------	------
YES	87832-4420	87832-4422	87832-7122	44	56.00	26.20	46.80	52.40	6.40	9.30
YES	87832-4620	87832-4622	87832-7222	46	56.00	26.20	47.05	52.40	6.40	9.30
YES	87832-4820	87832-4822	------	48	------	------	------	------	------	------
YES	87832-5020	87832-5022	87832-7422	50	72.00	34.20	53.05	68.40	6.40	9.30

ADD ILLUSTRATION
EC NO: S2009-0556 2009/02/23
DRWN:SKANG 2009/02/23
CH'KD:ATSEE 2009/02/23
APPR:MLONG 2009/02/23
DESCRIPTION
REV
A9

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: ATSEE DATE: 2003/10/14
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07
MATERIAL NO.: SEE TABLE

TITLE: MGRID, SHROUDED HEADER SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R

MOLEX INCORPORATED

DOCUMENT NO.: SD-87832-006
SHEET NO.: 4 OF 4
SIZE: A3

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