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Part Number: [0781740800](#)
Status: **Active**
Overview: [milligrd](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 8 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, with Press-fit Plastic Pegs, without Pick-and-Place Cap, Tube Packaging, Halogen-free, Lead-free

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-78174-100 \(PDF\)](#)

General

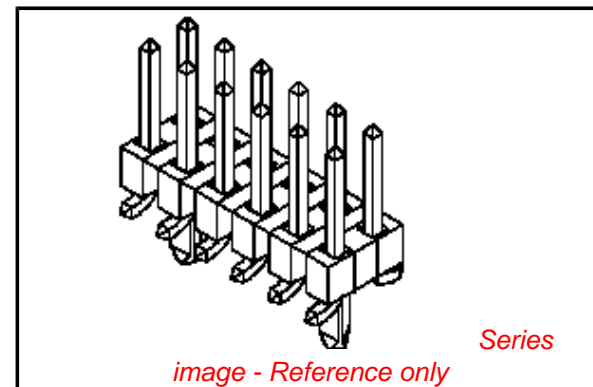
Product Family	PCB Headers
Series	78174
Application	Board-to-Board
Overview	milligrd
Product Name	Milli-Grid™

Physical

Breakaway	Yes
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Black
Durability (mating cycles max)	Contact Molex
First Mate / Last Break	No
Glow-Wire Compliant	No
Keying to Mating Part	None
Lock to Mating Part	None
Mated Height (in)	0.150 In
Mated Height (mm)	3.80 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
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
Polarized to Mating Part	No
Polarized to PCB	No
Robotic Placement	None
Shrouded	No
Stackable	Yes
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

Electrical

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



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

[78174Series](#)

Mates With

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

Material Info

Reference - Drawing Numbers

Product Specification

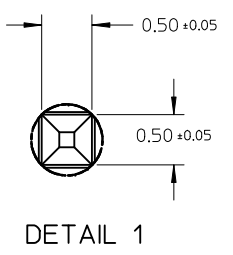
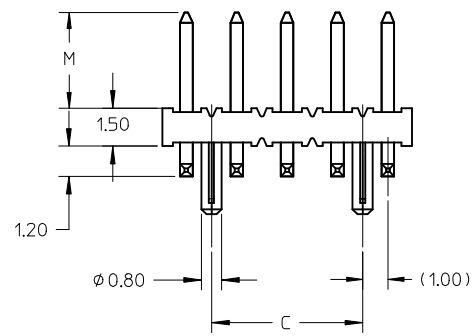
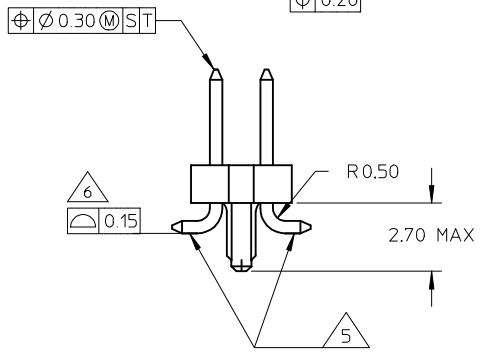
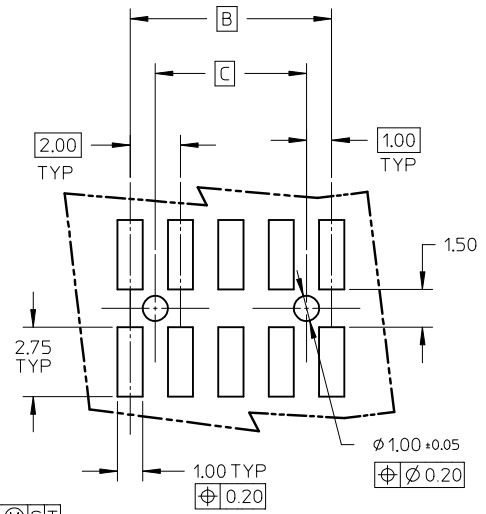
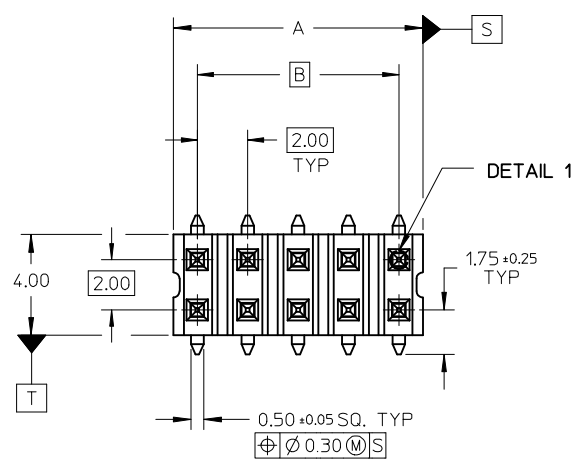
PS-78174-100

Sales Drawing

SD-78174-001

This document was generated on 05/31/2010

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NOTE:

1. MATERIAL:

- HSG - LCP, GLASS-FILLED,
UL 94V-0, COLOUR BLACK
- CAP - NYLON, GLASS-FILLED,
UL 94V-0, COLOUR BLACK
- PIN - 0.50 SQ PHOSPHOR BRONZE

2. PLATING:

- 0.38um MIN GOLD PLATE AT CONTACT AREA,
TIN PLATE AT SOLDER AREA,
BOTH OVER NICKEL UNDERPLATE

3. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION

4. PRODUCT SPEC PS-78174-100 APPLIES.

5 BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF TAIL.

6 COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.

7 CAP TO BE LOCATED AS CENTRAL OF PART AS POSSIBLE TOP SURFACE OF CAP TO BE FLAT FOR THE PURPOSE OF PICK & PLACE BY VACUUM SUCTION NOZZLE.

8. FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN (WITH TAPE & REEL ON 2ND SHEET). SHT 3 INDICATES THE TYPE OF EMBOSSED USED IN GENERAL.

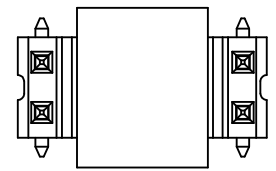
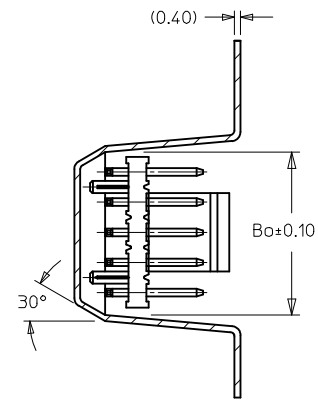
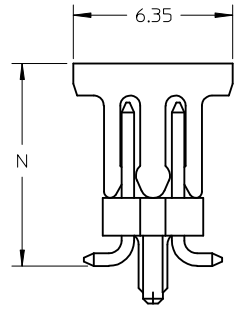
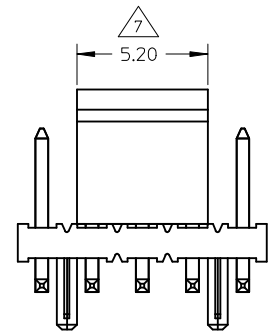
9. TUBE LENGTH IS 560MM REF STANDARD.

10. RECOMMENDED PCB BOARD THK IS 1.60±0.10 MM.

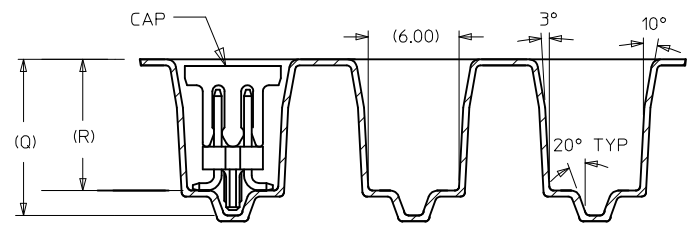
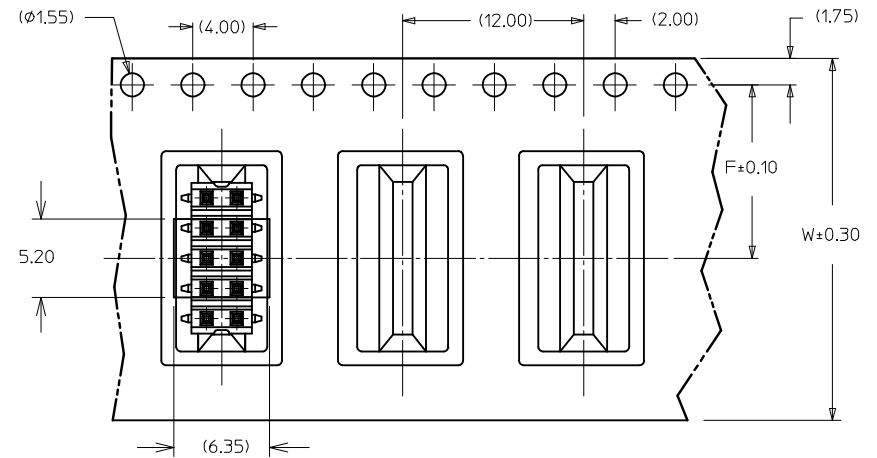
INITIAL RELEASE EC NO: S2009-0564 DRWN:SKANG 2009/03/26 CHKD:ATSEE 2009/03/26 APPR:MLONG 2009/03/27	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▼=0 C=0	mm INCH	MM ONLY	NTS	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± ---	DRAWN BY SKANG DATE 2009/02/05 CHECKED BY ATSEE DATE 2009/03/25 APPROVED BY MLONG DATE 2009/03/26	TITLE	CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT			
		ANGULAR ± 3 °	MATERIAL NO.	DOCUMENT NO.	MOLEX INCORPORATED			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE	SEE TABLE		SD-78174-001			SHEET NO. 1 OF 4
		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

F



PART WITH CAP IN TAPE & REEL ORIENTATION

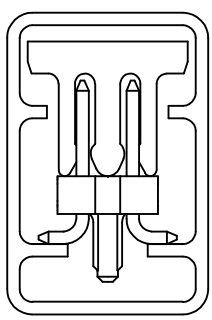


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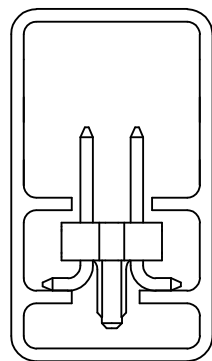
C

B

A



PART WITH CAP IN TUBE ORIENTATION



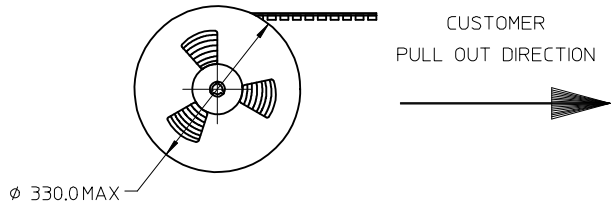
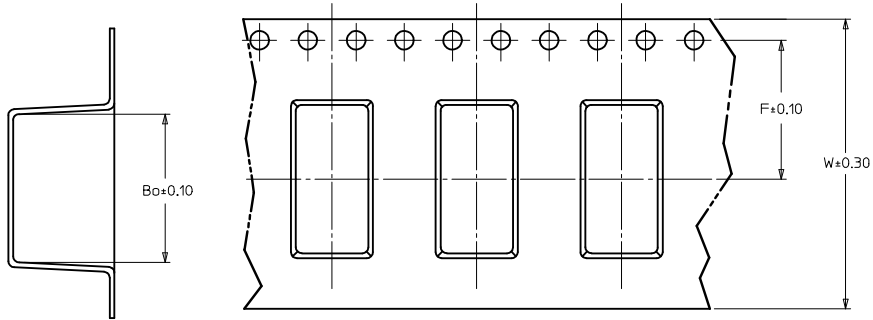
PART WITHOUT CAP IN TUBE ORIENTATION

INITIAL RELEASE EC NO: S2009-0564 DRWN:SKANG 2009/03/26 CHKD:ATSEE 2009/03/26 APPR:MLONG 2009/03/27	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SEE TABLE	DATE 2009/03/26	DOCUMENT NO. SD-78174-001	SHEET NO. 2 OF 4		

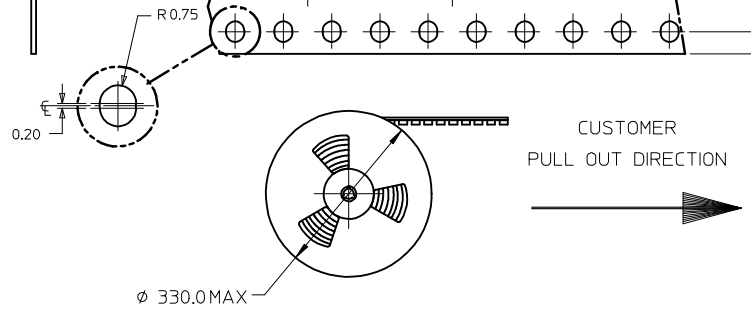
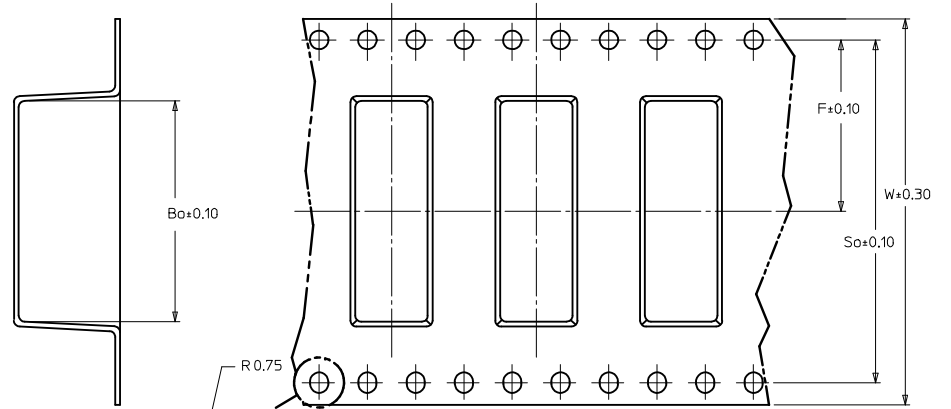
9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

EMBOSSED CARRIER TAPE TYPE 'A'



EMBOSSED CARRIER TAPE TYPE 'B'



INITIAL RELEASE EC NO: SZ009-0564 DRWN:SKANG 2009/03/26 CHKD:ATSEE 2009/03/26 APPR:MLONG 2009/03/27	DESCRIPTION A	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± ---	mm INCH DRAWN BY SKANG DATE 2009/02/05 CHECKED BY ATSEE DATE 2009/03/25 APPROVED BY MLONG DATE 2009/03/26	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT						
		ANGULAR ± 3 °			MATERIAL NO. SEE TABLE		MOLEX INCORPORATED			SHEET NO. 3 OF 4	
		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				

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1						
	PART NUMBER WITHOUT CAP IN TUBE	PART NUMBER WITH CAP IN TUBE	PART NUMBER WITH CAP IN TAPE & REEL	CKT SIZE	A	B	C	M	N	Q	R	Bo	F	So	W	EMBOSSSED TYPE
F	78174-0800	78174-0801	78174-0802	08	7.90	6.00	4.00	3.80	8.05	10.34	8.70	8.50	11.50	-	24.00	A

INITIAL RELEASE EC NO: S2009-0564 DRWN:SKANG 2009/03/26 CHKD:ATSEE 2009/03/26 APPR:MLONG 2009/03/27	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
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