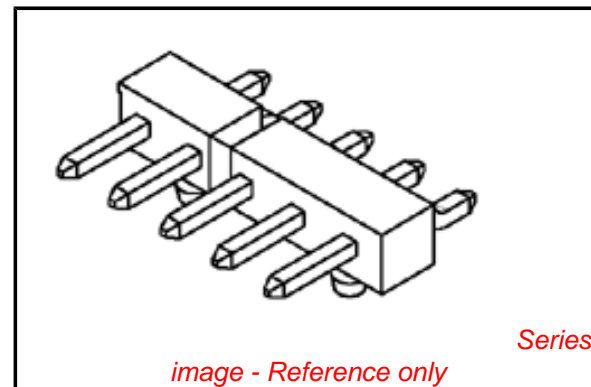


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0878580751](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Breakaway Header, Surface Mount, Single Row, Parallel, 2.54µm (100µ") Tin (Sn) Plating, with Peg, Mating Pin Length 3.20mm (.126"), 7 Circuits, Lead-free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-87761-100 \(PDF\)](#)



**General**

Product Family	PCB Headers
Series	<a href="#">87858</a>
Application	Wire-to-Board
Overview	<a href="#">milligrd</a>
Product Name	Milli-Grid™

**Physical**

Breakaway	Yes
Circuits (Loaded)	7
Circuits (maximum)	7
Color - Resin	Black
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	None
Mated Height (in)	0.126 In
Mated Height (mm)	3.20 mm
Material - Metal	Copper Alloy
Material - Plating Mating	Tin
Material - Plating Termination	Nickel
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Parallel
PC Tail Length (in)	0.110 In
PC Tail Length (mm)	2.80 mm
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Embossed Tape on Reel
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)	100
Plating min: Mating (µm)	2.54
Polarized to Mating Part	No
Polarized to PCB	Yes
Shrouded	No
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**

**China RoHS**



**Not Reviewed**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[87858Series](#)

**Mates With**

2.00 mm (.079") single row receptacles

**Electrical**

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

**Solder Process Data**

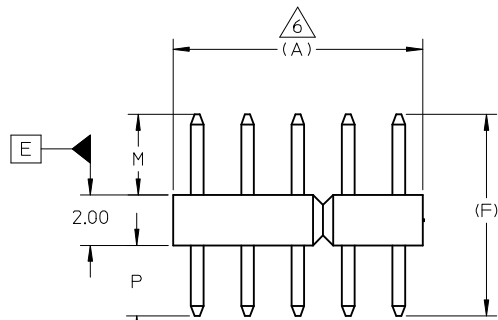
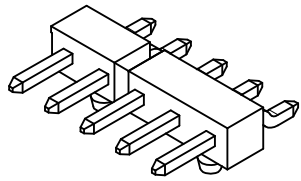
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

**Material Info****Reference - Drawing Numbers**

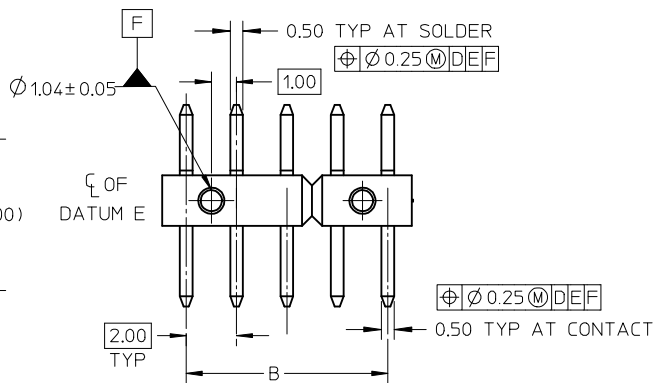
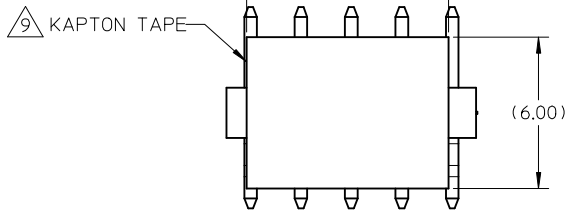
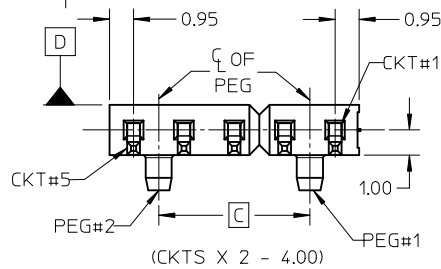
Product Specification	PS-87761-100
Sales Drawing	SD-87858-022

This document was generated on 05/25/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



8	CKT SIZE	
	0.10 Z	02 - 10
0.15 Z	11 - 19	



NOTES:

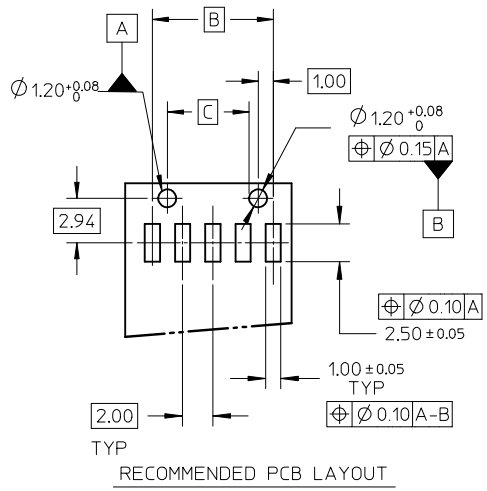
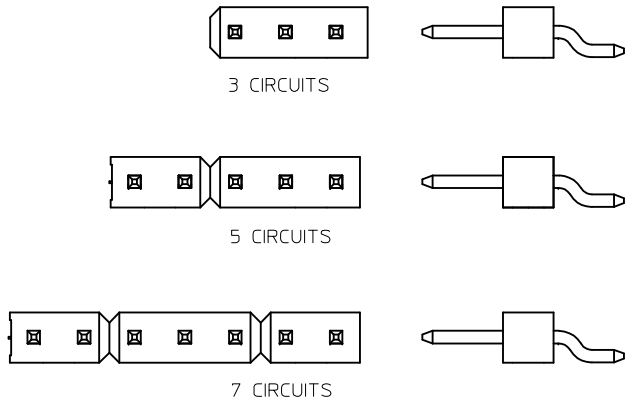
- MATERIAL:  
HSG: LCP, GLASS-FILLED, UL94V-0, COLOR:BLACK  
PIN: 0.50mm SQ, COPPER ALLOY
- PLATING:  
(1) 2.54µm TIN OVERALL PLATING OVER NICKEL OVERALL  
(2) 5.08µm TIN OVERALL PLATING OVER NICKEL OVERALL
- PACKAGING TYPE: SEE TABLE
- PACKAGING SPECIFICATION:  
TRAY: PK-89990-487  
TAPE & REEL: PK-89990-484
- PRODUCT SPEC PS-87761-100 APPLIES
- IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. MEASUREMENT AT BOTH ENDS, FROM CUT END TO THE CENTRELINE OF THE HOUSING CORE HOLE OF THE FIRST PIN REMAINS AT 0.95±0.20MM. CUTTING AND CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE.
- THE ABOVE CKT 5 IS FOR ILLUSTRATION PURPOSE ONLY
- COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE
- KAPTON TAPE LOCATION IS CENTRED AT THE PART AS POSSIBLE.
- RECOMMENDED PCB BOARD THICKNESS: 1.60±0.10mm

<b>EWRHSG MODIFICATION</b> EC NO: S2009-0295 DR:WATSEE 2009/02/09 CHKD:SKANG 2009/02/10 APPR:MLONG 2009/02/11	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	NTS	METRIC		
				DRAWN BY	DATE	TITLE		
				CWLAM	2007/12/04	2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY		
		CHECKED BY	DATE	APPROVED BY			MOLEX INCORPORATED	
		KWLEE	2007/12/17	KWLEE 2007/12/17				
		APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.			
				SEE TABLE	SD-87858-022			
				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
				A3	1 OF 3			

CKT SIZE	DIMENSION		
	A	B	C
03	5.90	4.00	-
05	9.90	8.00	6.00
07	13.90	12.00	10.00
09	17.90	16.00	14.00
11	21.90	20.00	18.00
13	25.90	24.00	22.00
15	29.90	28.00	26.00
17	33.90	32.00	30.00
19	37.90	36.00	34.00

PART NO. IN TAPE & REEL PACKAGING	CKT # SIZE	PART NO. IN TRAY PACKAGING	KAPTON TAPE	PEG	PLATING OPTION	VOID POSITION	DIMENSION		
							F	MATING END	SOLDER TAIL (P)
87858-0550	5	-	Y	N	1	----	8.00	3.20	2.80
87858-0750	7	-	Y	N	1	----	8.00	3.20	2.80
87858-0751	7	-	N	Y	1	----	8.00	3.20	2.80
87858-0760	7	-	Y	N	1	----	8.97	4.17	2.80

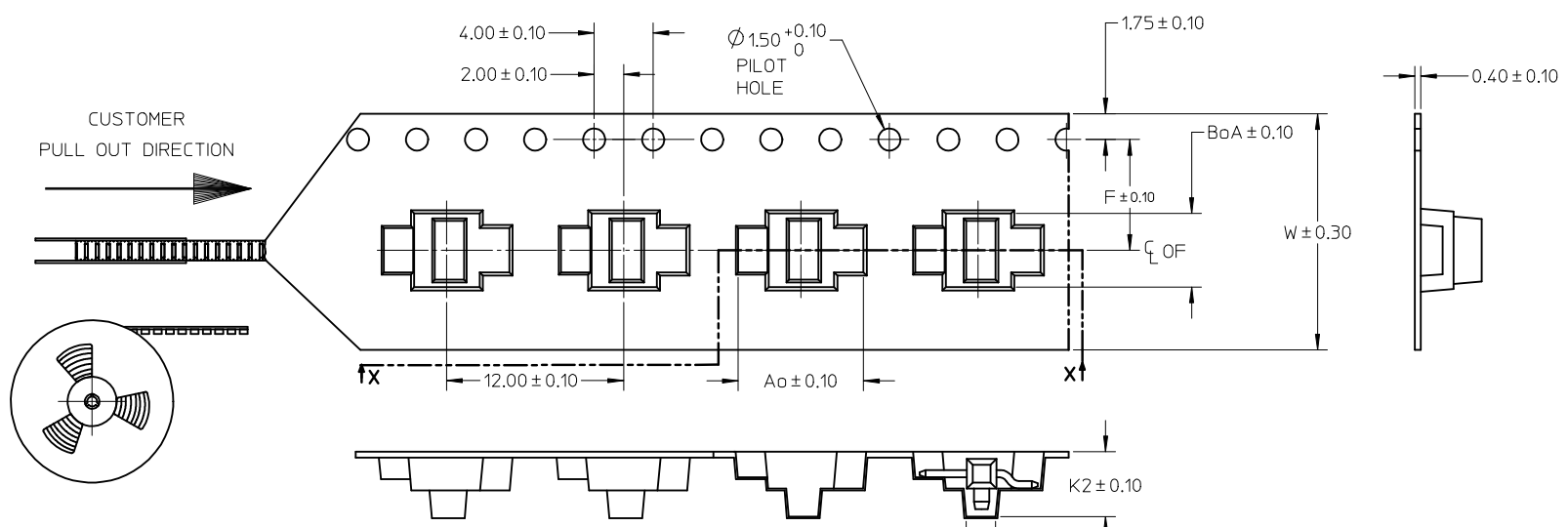
PART WITHOUT PEG CONFIGURATION



<b>EWRHSG MODIFICATION</b> EC NO: S2009-0295 DR: WATSEE 2009/02/09 CHK: DSKANG 2009/02/10 APPR: MLONG 2009/02/11	DESCRIPTION REV	<b>QUALITY SYMBOLS</b> = 0 = 0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>	<b>DIMENSION STYLE</b> MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm      INCH	DRAWN BY      DATE CWLAM      2007/12/04	TITLE 2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY			
		4 PLACES    ± ---    ± --- 3 PLACES    ± ---    ± --- 2 PLACES    ± 0.2    ± --- 1 PLACE     ± ---    ± ---	CHECKED BY      DATE KWLEE            2007/12/17	<b>MOLEX INCORPORATED</b> DOCUMENT NO.      SHEET NO. SD-87858-022      2 OF 3			
		ANGULAR ± 3 °	APPROVED BY      DATE KWLEE            2007/12/17				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.      SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

CKT	DIMENSION					PACKABLE QTY
	BoA	Ao	K2	F	W	
5	11.20	8.50	4.40	11.50	24.00	1200
7	15.20	8.50	4.40	11.50	24.00	1200

TAPE AND REEL INFORMATION

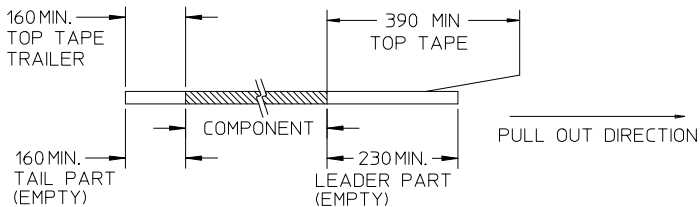


SECTION X-X

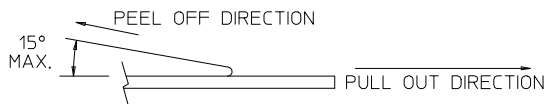
PART IN TAPE & REEL ORIENTATION (FOR REF. ONLY)

NOTES:

1. LEADER AND TRAILER TAPE



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



- 3. MATERIAL: BLACK P.S CONDUCTIVE
- 4. PACKAGING STANDARD IS AS PER EIA-481.
- 5. THE TAPE IS TREATED FOR ANTI-STATIC.

<b>EWRHSG MODIFICATION</b> EC NO: S2009-0295 DR:WATSEE 2009/02/09 CHK:D:SKANG 2009/02/10 APPR:MLONG 2009/02/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▼=0 ◻=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	1:1	METRIC	
	DESCRIPTION	DRAWN BY	DATE	TITLE		
		CWLAM	2007/12/04	2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY		
	APPROVED BY	DATE	MATERIAL NO.			
	KWLEE	2007/12/17	SD-87858-022			
			DOCUMENT NO.			
			SHEET NO.			
			3 OF 3			
			SIZE			
			A3			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			