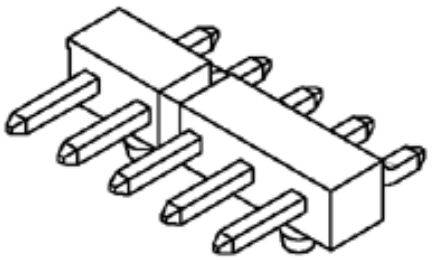
molex
one company > a world of innovation

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878580760
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Breakaway Header, Surface Mount, Single Row, Parallel, 2.54µm (100µ") Tin (Sn) Plating, without Peg, withKapton Tape, Mating Pin Length 4.17mm (.164"), 7 Circuits, Lead-free



Series image - Reference only

Documents:
Drawing (PDF)
RoHS Certificate of Compliance (PDF)
Product Specification PS-87761-100 (PDF)

General

Product Family	PCB Headers
Series	87858
Application	Wire-to-Board
Overview	milligrid
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)	0.164 In
Mated Height (mm)	4.17 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
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
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

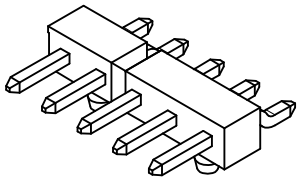
Material Info

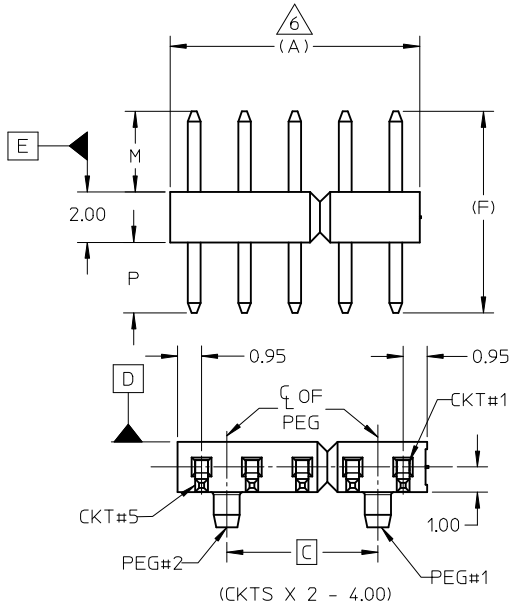
Reference - Drawing Numbers

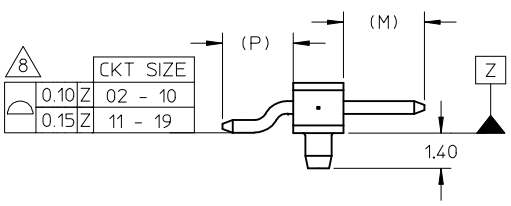
Product Specification	PS-87761-100
Sales Drawing	SD-87858-022

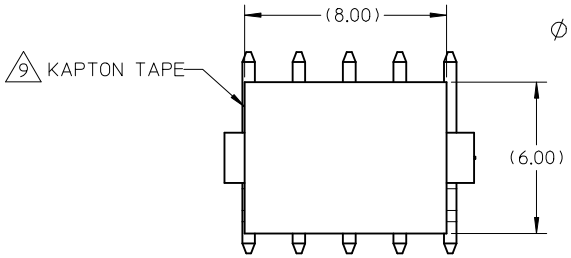
This document was generated on 05/25/2010

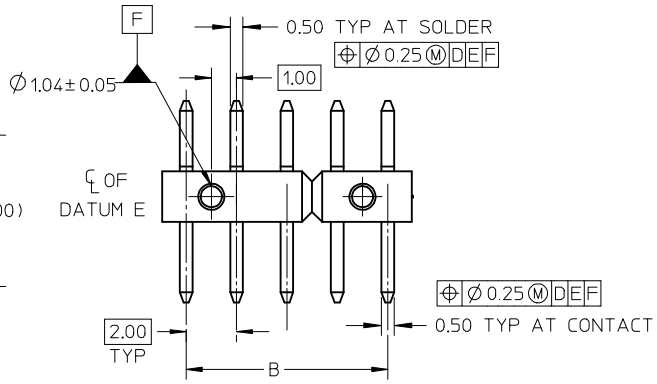
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION











NOTES:

1. MATERIAL:
   HSG: LCP, GLASS-FILLED, UL94V-0, COLOR:BLACK
   PIN: 0.50mm SQ, COPPER ALLOY
2. PLATING:
   (1) 2.54μm TIN OVERALL PLATING
   OVER NICKEL OVERALL
   (2) 5.08μm TIN OVERALL PLATING
   OVER NICKEL OVERALL
3. PACKAGING TYPE: SEE TABLE
4. PACKAGING SPECIFICATION:
   TRAY: PK-89990-487
   TAPE & REEL: PK-89990-484
5. PRODUCT SPEC PS-87761-100 APPLIES
6. 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 ACCEPTACLE.
7. THE ABOVE CKT 5 IS FOR ILLUSTRATION PURPOSE ONLY
8. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE
9. KAPTON TAPE LOCATION IS CENTRED AT THE PART AS POSSIBLE.
10. RECOMMENDED PCB BOARD THICKNESS: 1.60±0.10mm

EWR:HSG MODIFICATION	2009/02/09		
EC NO: S2009-0295	2009/02/10		
DRWN:ATSEE	2009/02/11		
CH'KD:SKANG			
APPR:MLONG			
DESCRIPTION			
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	CWLAM
DATE	2007/12/04
CHECKED BY	KWLEE
DATE	2007/12/17
APPROVED BY	KWLEE
DATE	2007/12/17
MATERIAL NO.	SEE TABLE
TITLE	2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY
	MOLEX INCORPORATED
DOCUMENT NO.	SD-87858-022
SHEET NO.	1 OF 3
SIZE	A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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 M	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



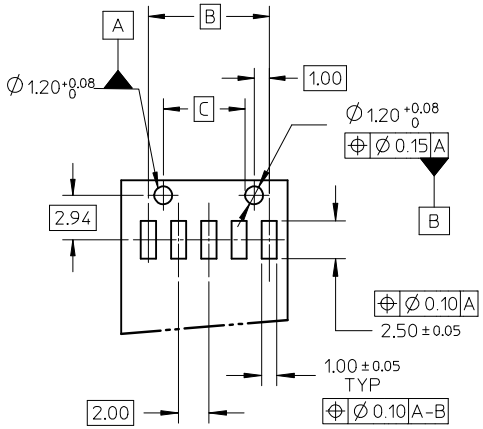
3 CIRCUITS



5 CIRCUITS



7 CIRCUITS



RECOMMENDED PCB LAYOUT

EWR:HSG MODIFICATION
EC NO: S2009-0295 2009/02/09
DRWN:ATSEE 2009/02/10
CH'KD:SKANG 2009/02/11
APPR:MLONG
DESCRIPTION
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: CWLAM DATE: 2007/12/04
CHECKED BY: KWLEE DATE: 2007/12/17
APPROVED BY: KWLEE DATE: 2007/12/17

TITLE: 2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY

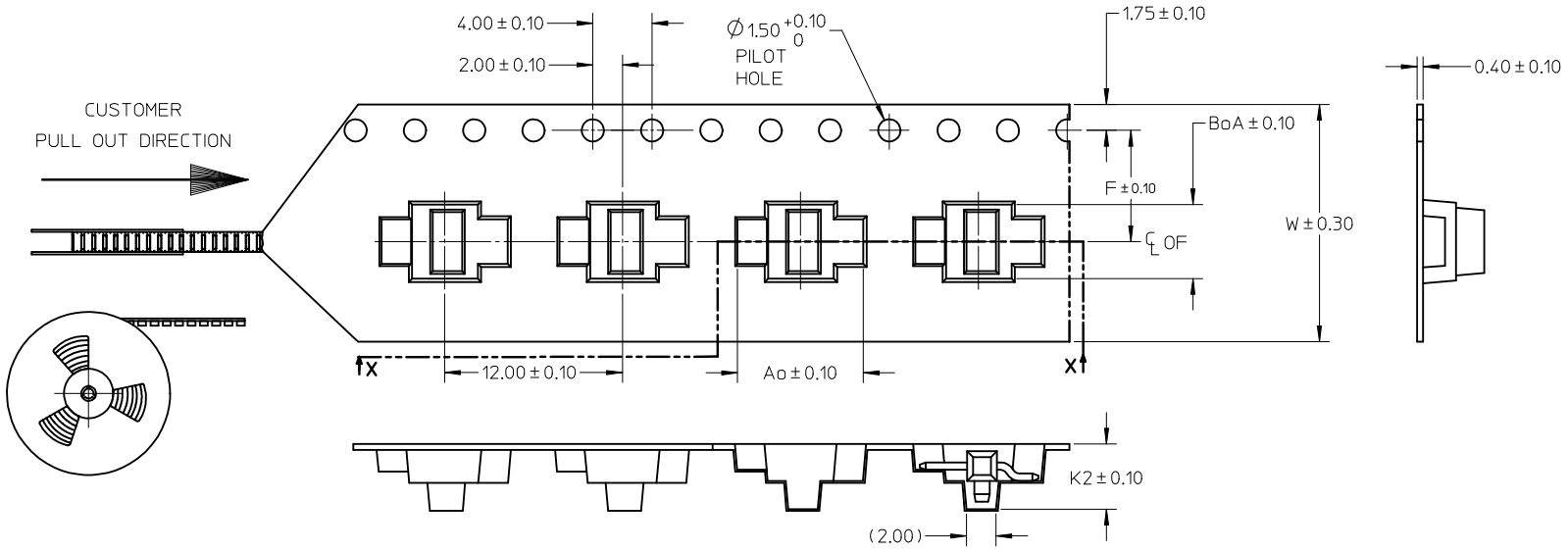
MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87858-022
SHEET NO.: 2 OF 3
SIZE: A3

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

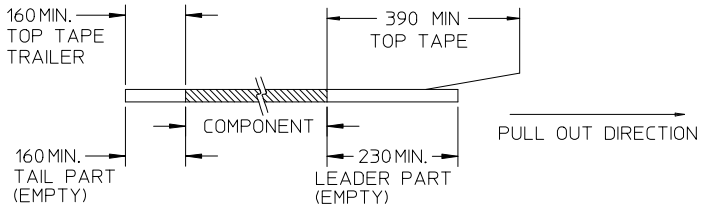


SECTION X-X

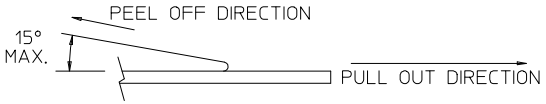
PART IN TAPE & REEL ORIENTATION (FOR REF. ONLY)

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.

EWR:HSG MODIFICATION
EC NO: S2009-0295 2009/02/09
DRWN:ATSEE 2009/02/10
CH'KD:SKANG 2009/02/11
APPR:MLONG
DESCRIPTION
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: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: CWLAM DATE: 2007/12/04
CHECKED BY: KWLEE DATE: 2007/12/17
APPROVED BY: KWLEE DATE: 2007/12/17

TITLE: 2MM SINGLE ROW HDR (ODD) SMT WITH PEG, BREAKAWAY

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87858-022
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