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Part Number: [0877594674](#)
Status: **Active**
Overview: [milligrid](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 46 Circuits, 0.38μm (15μ") Gold (Au) Selective Plating, without Press-fit Plastic Pegs, with Pick-and-Place Cap, Tape and Reel Packaging, Lead-free

Documents:
[3D Model](#) [Product Specification PS-87761-100 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

UL E29179

General

Product Family PCB Headers
Series [87759](#)
Application Board-to-Board
Overview [milligrid](#)
Product Name Milli-Grid™

Physical

Breakaway Yes
Circuits (Loaded) 46
Circuits (maximum) 46
Color - Resin Black
Durability (mating cycles max) 100
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) 0.150 In
Mated Height (mm) 3.80 mm
Material - Metal Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin Nylon
Number of Rows 2
Orientation Vertical
PCB Locator No
PCB Retention None
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) 15
Plating min: Mating (μm) 0.38
Polarized to Mating Part No
Polarized to PCB No
Robotic Placement Pick and Place Cap
Shrouded No
Stackable No
Temperature Range - Operating -55°C to +105°C

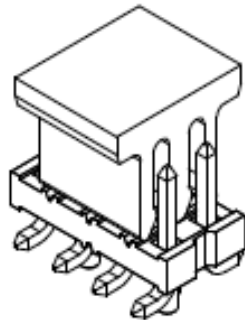


image - Reference only

Series

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Contains SVHC: No
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
[87759Series](#)

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

Termination Interface: Style	Surface Mount
Electrical	
Current - Maximum per Contact	2A
Voltage - Maximum	125V
Solder Process Data	
Lead-free Process Capability	Reflow Capable (SMT only)
Process Temperature max. C	250
Material Info	
Reference - Drawing Numbers	
Packaging Specification	PK-89990-485
Product Specification	PS-87761-100
Sales Drawing	SD-87759-117

This document was generated on 05/25/2010

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F

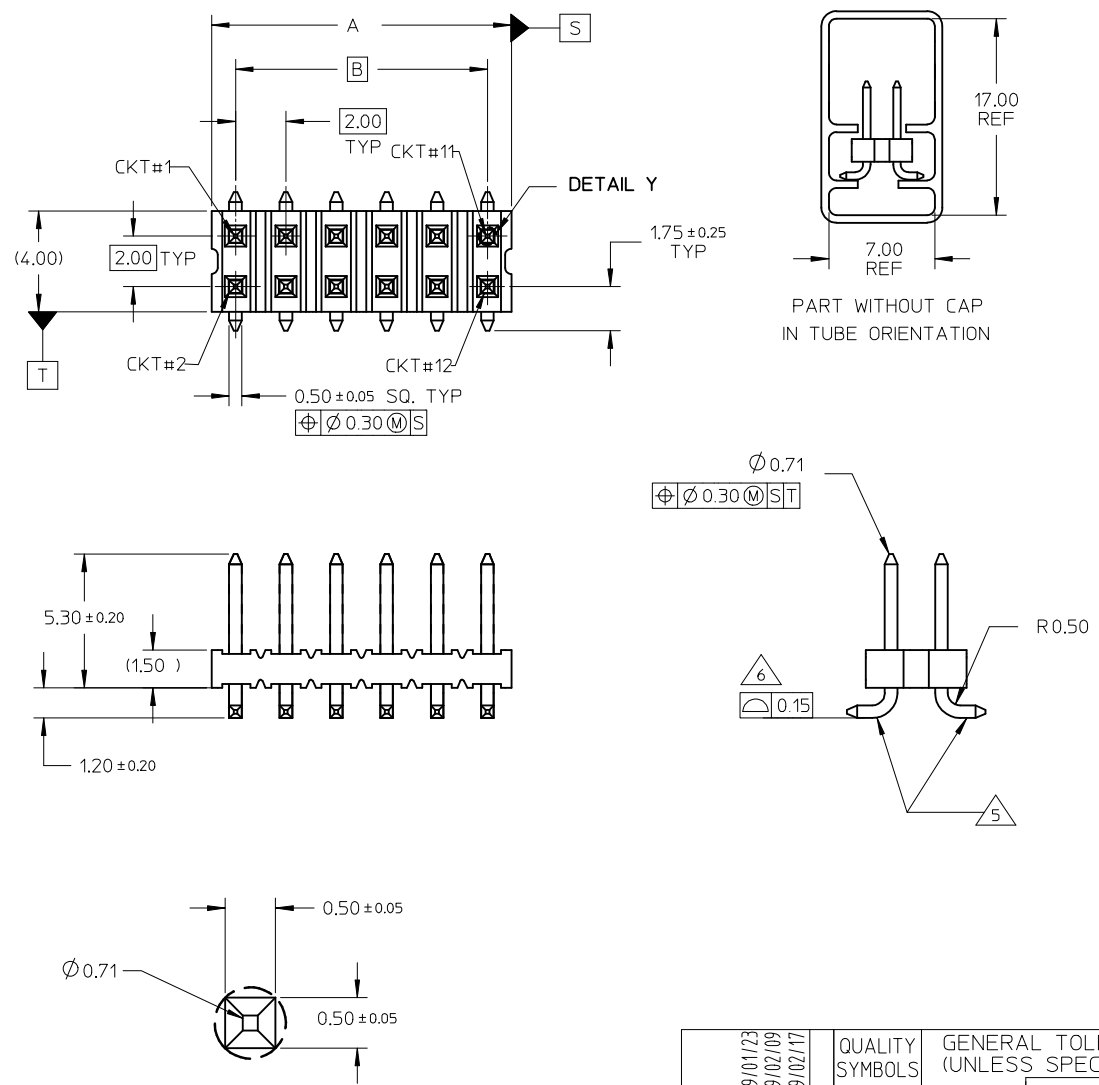
E

D

C

B

A



NOTE:

1. MATERIAL:
HSG & 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-87761-100 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 FLAT 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, 12CKT IS SHOWN.

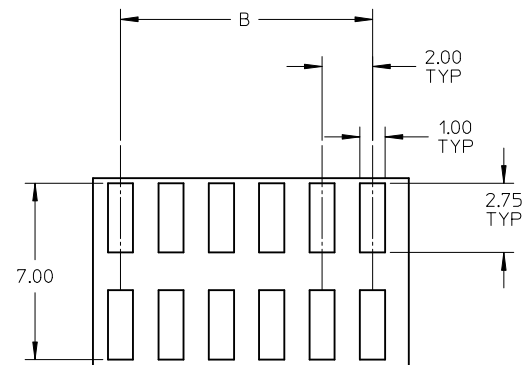
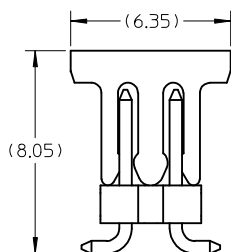
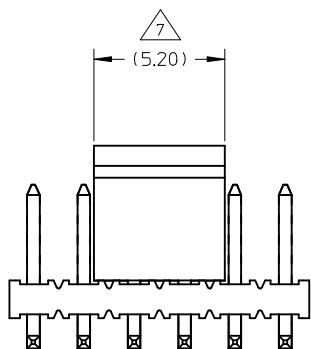
9 CKT 4 & 6 IS CUT FROM CKT 8 & 12 RESPECTIVELY
ROUGH EDGES ARE EXPECTED ALONG THE CUTTING EDGES.

10 PART TO BE PACKED IN TRAY ONLY.

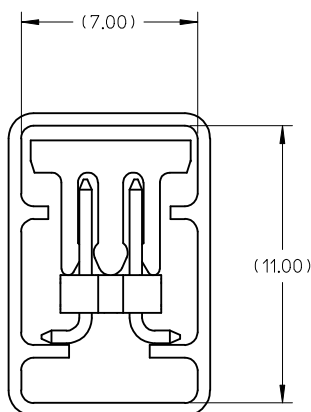
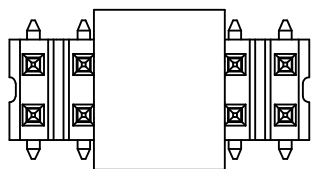
11. TUBE LENGTH IS 560MM REF STANDARD.

DETAIL Y

ADD. OPTION EC NO: S2009-0510 DRAWN AT SEE CHKD:SKANG APPR:MLONG	2009/01/23 2009/02/09 2009/02/17	DESCRIPTION	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 2003/12/12	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT			
				4 PLACES	± ---	± ---	CHECKED BY	DATE				
				3 PLACES	± ---	± ---	KCL ING	2004/01/12	MOLEX MOLEX INCORPORATED			
				2 PLACES	± 0.2	± ---	APPROVED BY	DATE				
				1 PLACE	± ---	± ---	SKTOH	2004/01/12	DOCUMENT NO. SD-87759-117			
				ANGULAR ± 3 °			MATERIAL NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE									
B2	REV			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



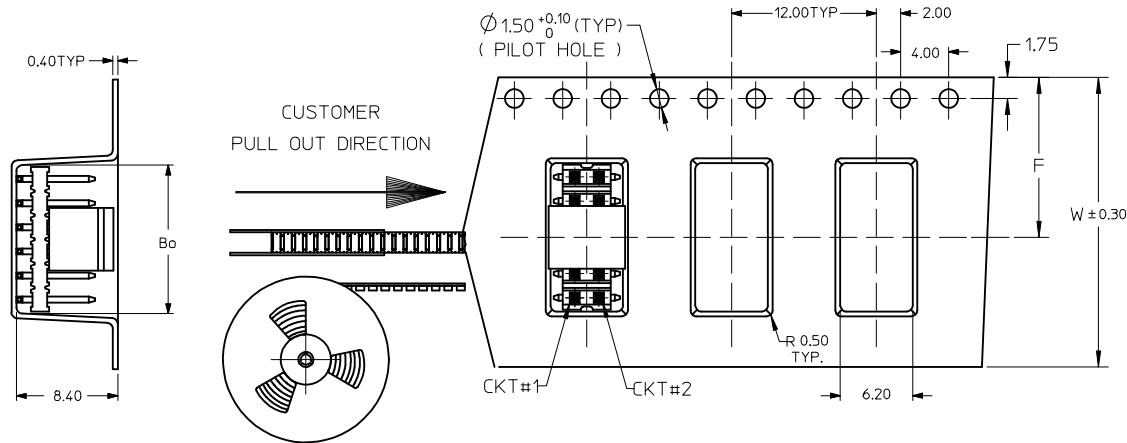
RECOMMENDED SOLDER PAD LAYOUT



ADD. OPTION EC NO: S2009-0510 DRAWN AT SEE CHK'D: SKANG APPR: MLONG 2009/01/23 2009/02/09 2009/02/17	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY	DATE	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT				
			4 PLACES	± ---	± ---	KSEE	2003/12/12					
			3 PLACES	± ---	± ---	CHECKED BY	DATE					
			2 PLACES	± 0.2	± ---	KCLING	2004/01/12	MOLEX INCORPORATED				
			1 PLACE	± ---	± ---	APPROVED BY	DATE					
			ANGULAR ± 3 °			SKTOH	2004/01/12	DOCUMENT NO.		SHEET NO.		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		SD-87759-117		2 OF 6		
						SEE TABLE						
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

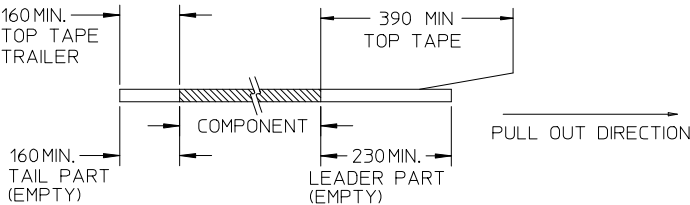
10 9 8 7 6 5 4 3 2 1

EMBOSSED CARRIER TAPE TYPE "A"

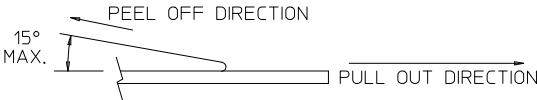


NOTES:

12. LEADER AND TRAILER TAPE



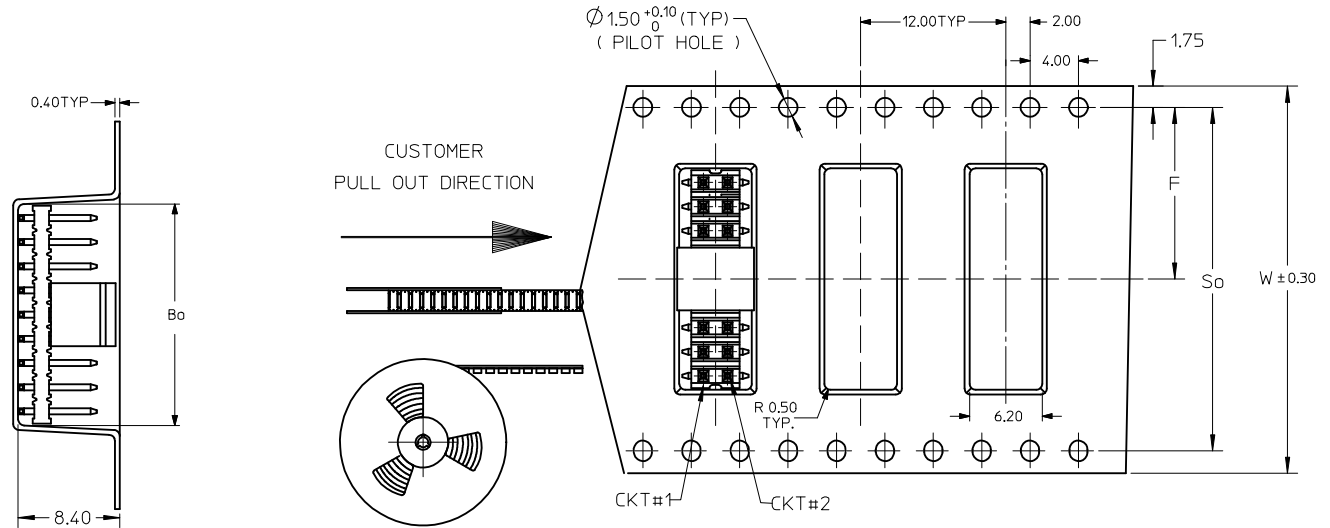
13. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 14. PACKAGING STANDARD IS AS PER EIA-481.
- 15. TAPE & REEL QUANTITY = 750 PCS/REEL
- 16. THE TAPE IS TREATED FOR ANTI-STATIC

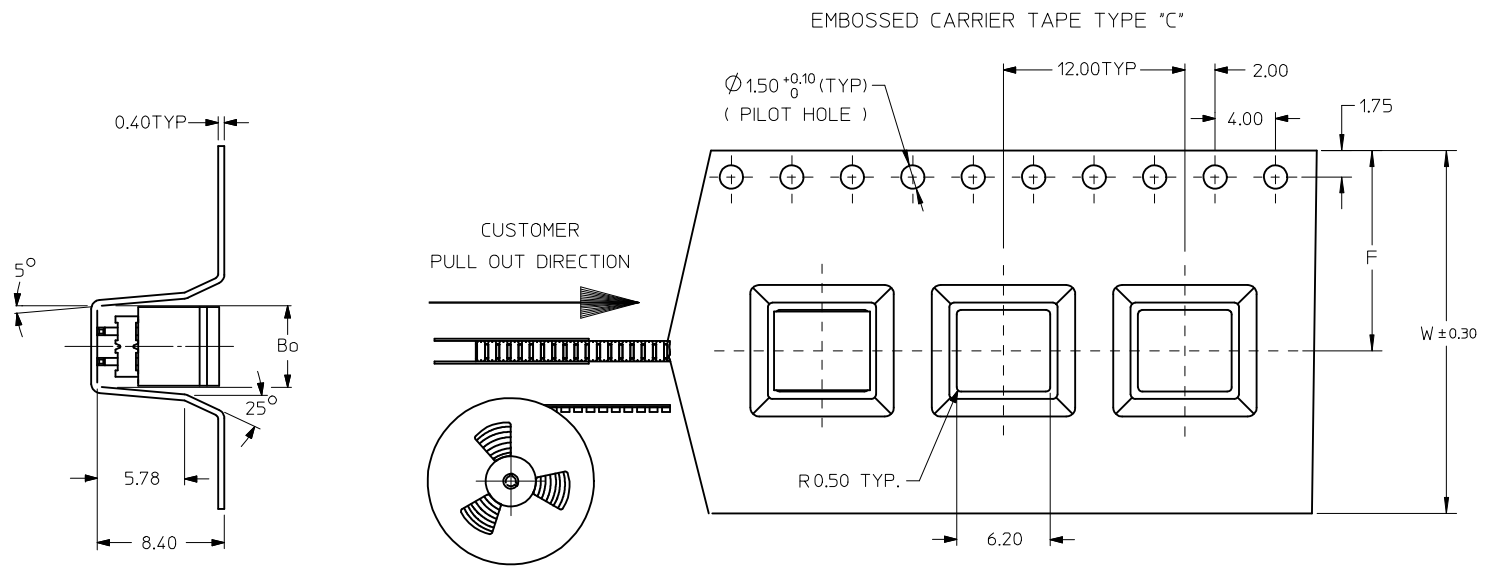
ADD. OPTION EC NO: S2009-0510 DRW:ATSEE CHKD:SKANG APPR:MLONG B2	2009/01/23 2009/02/09 2009/02/17	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
						MM ONLY		NTS	METRIC			
				mm	INCH	DRAWN BY	DATE	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT MOLEX MOLEX INCORPORATED				
				4 PLACES	± ---	± ---	KSEE					2003/12/12
				3 PLACES	± ---	± ---	CHECKED BY					DATE
				2 PLACES	± 0.2	± ---	KCL ING					2004/01/12
				1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX MOLEX INCORPORATED			
				ANGULAR ± 3 °		SKTOH	2004/01/12					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
						SEE TABLE		SD-87759-117		3 OF 6		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												

EMBOSSED CARRIER TAPE TYPE "B"

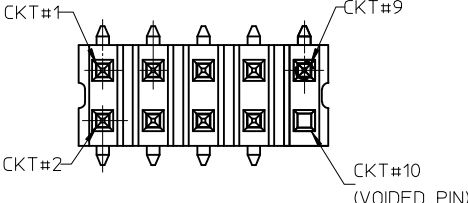


ADD. OPTION EC NO: S2009--0510 2009/01/23 DRW:ATSEE 2009/02/09 CHKD:SKANG 2009/02/17 APPR:MLONG	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY KSEE	DATE 2003/12/12	CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT				
			4 PLACES	± ---	± ---	CHECKED BY	DATE					
			3 PLACES	± ---	± ---	KCLING	2004/01/12					
			2 PLACES	± 0.2	± ---	APPROVED BY	DATE	MOLEX INCORPORATED				
			1 PLACE	± ---	± ---	SKTOH	2004/01/12					
ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87759-117		4 OF 6						
B2	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

THIS TYPE OF CARRIER IS FOR CKT SIZE 8 AND BELOW.

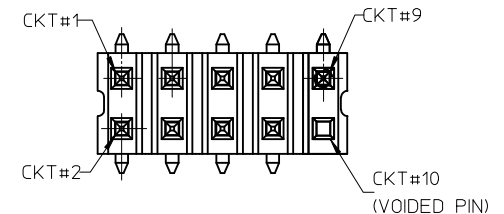


ADD. OPTION EC NO: S2009-0510 2009/01/23 DRWN:ATSEE 2009/02/09 CHKD:SKANG 2009/02/17 APPR:MLONG	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
				mm	INCH	DRAWN BY KSEE	DATE 2003/12/12	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT MOLEX MOLEX INCORPORATED	
			4 PLACES	± ---	± ---	CHECKED BY	DATE		
			3 PLACES	± ---	± ---	KCL ING	2004/01/12		
			2 PLACES	± 0.2	± ---	APPROVED BY	DATE		
			1 PLACE	± ---	± ---	SKTOH	2004/01/12	DOCUMENT NO.	
ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SD-87759-117			
B2	REV				SIZE A3	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 WITHOUT CAP IN TUBE	PART NUMBER WITH CAP IN TUBE	PART NUMBER WITH CAP IN TAPE AND REEL.	CKT SIZE	VOID CKTS	A	B	Bo	F	So	W	EMBOSSED TYPE			
F	87759-0414 	87759-0464	87759-0474	4	--	NA	2.00	5.40	11.50	-	24.00	C	NOTES:  VOIDED PIN CKT#10 FOR PART#87759-1002		
	87759-0614 	87759-0664	87759-0674	6	--	NA	4.00	7.20	11.50	-	24.00	C			
	87759-0814	87759-0864	87759-0874	8	--	7.90	6.00	8.20	11.50	-	24.00	C			
E	87759-1014	87759-1064	87759-1074	10	--	9.90	8.00	10.20	11.50	-	24.00	A			
	87759-1002 	87759-1003 	87759-1004 	10	10	9.90	8.00	10.20	11.50	-	24.00	A			
	87759-1214	87759-1264	87759-1274	12	--	11.90	10.00	12.20	11.50	-	24.00	A			
	87759-1414	87759-1464	87759-1474	14	--	13.90	12.00	14.20	11.50	-	24.00	A			
	87759-1614	87759-1664	87759-1674	16	--	15.90	14.00	16.20	14.20	28.40	32.00	B			
D	87759-1814	87759-1864	87759-1874	18	--	17.90	16.00	18.20	14.20	28.40	32.00	B			
	87759-2014	87759-2064	87759-2074	20	--	19.90	18.00	20.20	14.20	28.40	32.00	B			
	87759-2214	87759-2264	87759-2274	22	--	21.90	20.00	22.20	20.20	40.40	44.00	B			
	87759-2414	87759-2464	87759-2474	24	--	23.90	22.00	24.20	20.20	40.40	44.00	B			
	87759-2614	87759-2664	87759-2674	26	--	25.90	24.00	26.20	20.20	40.40	44.00	B			
	87759-2814	87759-2864	87759-2874	28	--	27.90	26.00	28.20	20.20	40.40	44.00	B			
	87759-3014	87759-3064	87759-3074	30	--	29.90	28.00	30.20	20.20	40.40	44.00	B			
C	87759-3214	87759-3264	87759-3274	32	--	31.90	30.00	32.20	20.20	40.40	44.00	B			
	87759-3414	87759-3464	87759-3474	34	--	33.90	32.00	34.20	26.20	52.40	56.00	B			
	87759-3614	87759-3664	87759-3674	36	--	35.90	34.00	36.20	26.20	52.40	56.00	B			
	87759-3814	87759-3864	87759-3874	38	--	37.90	36.00	38.20	26.20	52.40	56.00	B			
	87759-4014	87759-4064	87759-4074	40	--	39.90	38.00	40.20	26.20	52.40	56.00	B			
	87759-4214	87759-4264	87759-4274	42	--	41.90	40.00	42.20	26.20	52.40	56.00	B			
	87759-4414	87759-4464	87759-4474	44	--	43.90	42.00	44.20	26.20	52.40	56.00	B			
B	87759-4614	87759-4664	87759-4674	46	--	45.90	44.00	46.20	26.20	52.40	56.00	B			
	87759-4814	87759-4864	87759-4874	48	--	47.90	46.00	48.20	26.20	52.40	56.00	B			
	87759-5014	87759-5064	87759-5074	50	--	49.90	48.00	50.20	34.20	68.40	72.00	B			

NOTES:

 VOIDED PIN CKT#10 FOR PART#87759-1002



A	ADD. OPTION EC NO: S2009-0510 DRAWN AT SEE CHKD: SKANG APPR: MLONG REV 2009/01/23 2009/02/09 2009/02/17					QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table><tr><td></td><td>mm</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± ---</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr><tr><td colspan="3">ANGULAR ± 3 °</td></tr></table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	ANGULAR ± 3 °			DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
									mm	INCH																			
								4 PLACES	± ---	± ---																			
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MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87759-117	SHEET NO. 6 OF 6																											
SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																												
fb_frame_A3_P_AM.T Rev. E 2006/04/15	9	8	7	6	5	4	3	2	1																				