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Part Number: [0877591814](#)
Status: **Active**
Overview: [milligrid](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 18 Circuits, 0.38μm (15μ") Gold (Au) Selective Plating, without Press-fit Plastic Pegs, Lead-free

Documents:

3D Model	Product Specification PS-87761-100 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

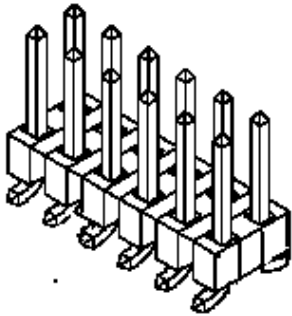
UL	E29179
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General

Product Family	PCB Headers
Series	87759
Application	Board-to-Board
Overview	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	Yes
Circuits (Loaded)	18
Circuits (maximum)	18
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	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
Shrouded	No
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount



Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
**REACH SVHC
Contains SVHC: No**
**Halogen-Free
Status**

China RoHS



Not Reviewed

**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](#)

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-89990-475
Product Specification	PS-87761-100
Sales Drawing	SD-87759-117

This document was generated on 05/25/2010

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F

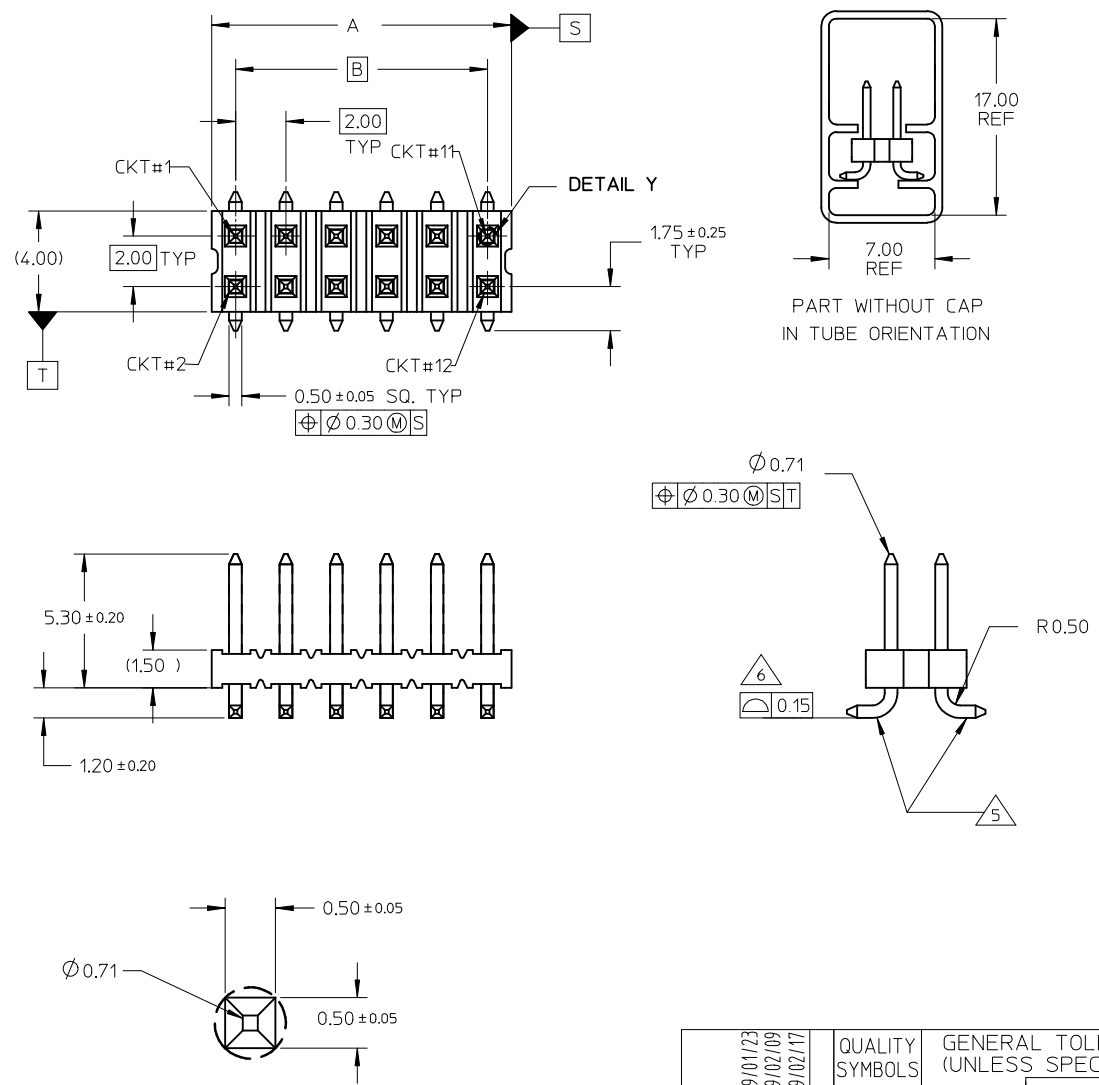
E

D

C

B

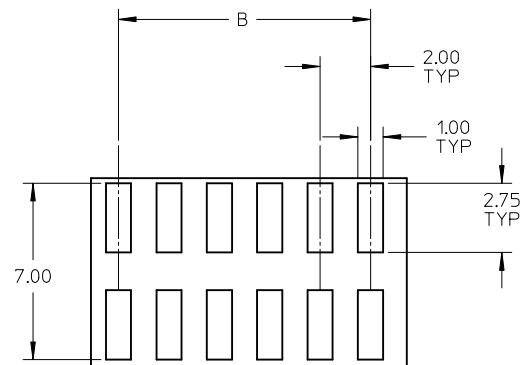
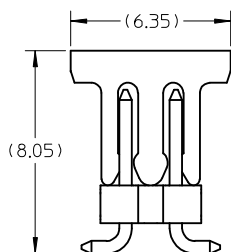
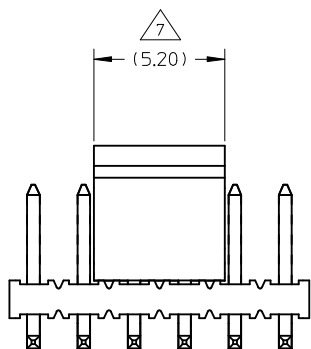
A



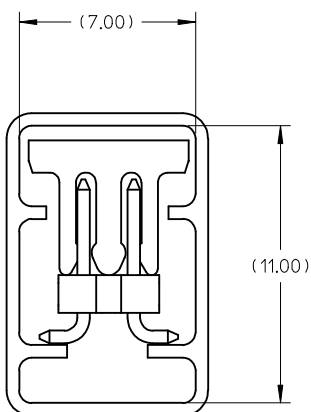
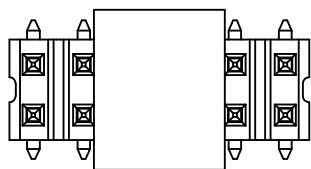
- NOTE:
1. MATERIAL:
HSG & CAP - NYLON, GLASS FILLED
UL 94V-0, COLOUR BLACK

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.

ADD. OPTION		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2009-0510		DESCRIPTION		mm		MM ONLY		NTS		METRIC			
2009/01/23		DRAWN BY		± ---		DATE		DATE		DATE		DATE	
2009/02/09		CHECKED BY		± ---		DATE		DATE		DATE		DATE	
2009/02/17		APPROVED BY		± 0.2		DATE		DATE		DATE		DATE	
		SKT0H		± ---		DATE		DATE		DATE		DATE	
		MATERIAL NO.		ANGULAR ± 3 °		DATE		DATE		DATE		DATE	
		SIZE		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		DOCUMENT NO.		SHEET NO.		SHEET NO.	
B2		REV											



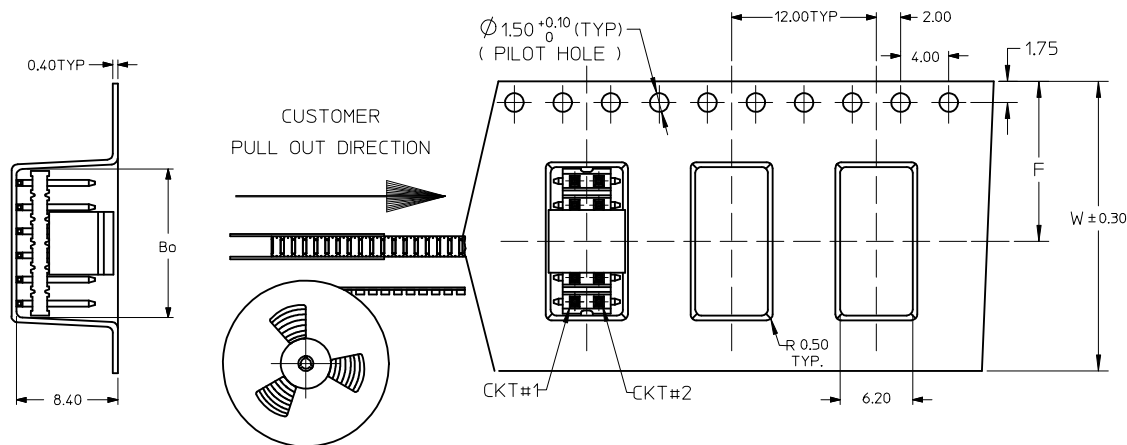
RECOMMENDED SOLDER PAD LAYOUT



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		
					DRAWN BY	DATE	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT				
					CHECKED BY	DATE					
					APPROVED BY	DATE	MOLEX INCORPORATED SD-87759-117				
			ANGULAR ± 3 °		MATERIAL NO.						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SHEET NO. 2 OF 6				
SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

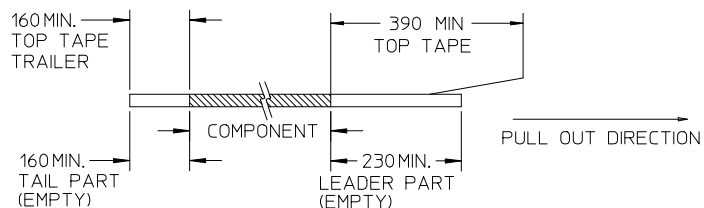
10 9 8 7 6 5 4 3 2 1

EMBOSSED CARRIER TAPE TYPE "A"

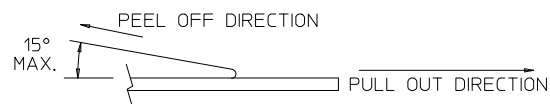


NOTES:

12. LEADER AND TRAILER TAPE



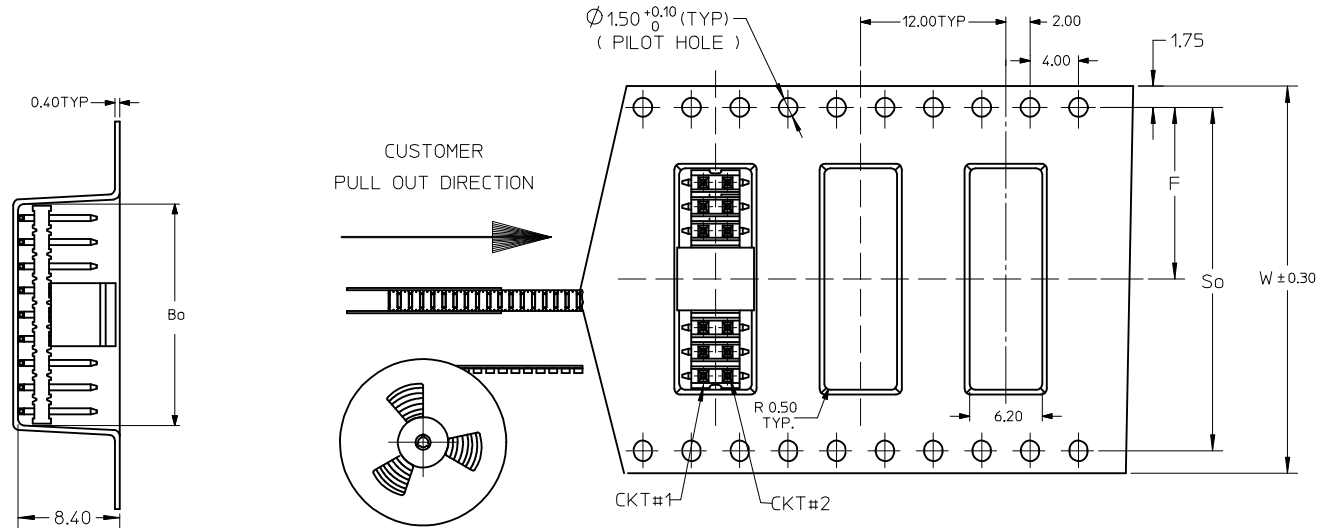
13. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



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

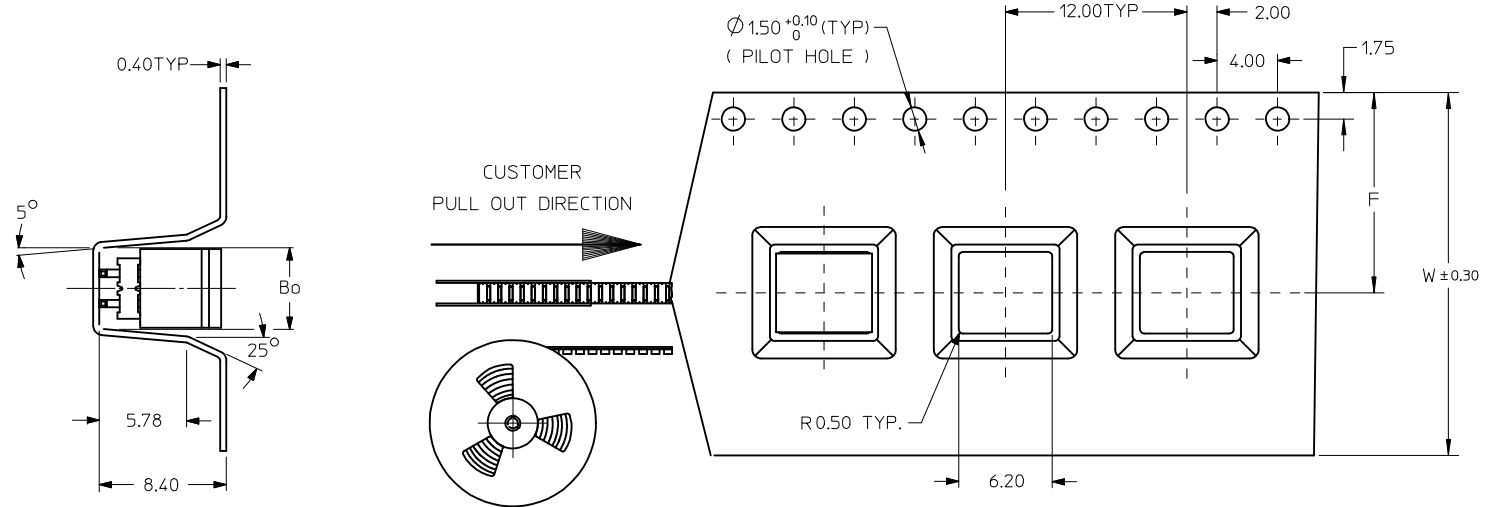
ADD. OPTION EC NO: S2009-0510 2009/01/23 DRW:ATSEE CHK'D:SKANG 2009/02/09 APPR:MLONG 2009/02/17	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					DRAWN BY KSEE	DATE 2003/12/12	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT				
					CHECKED BY KCLING	DATE 2004/01/12					
					APPROVED BY SKTOH	DATE 2004/01/12	MOLEX INCORPORATED				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE TABLE					
B2	REV					SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

EMBOSSED CARRIER TAPE TYPE "B"

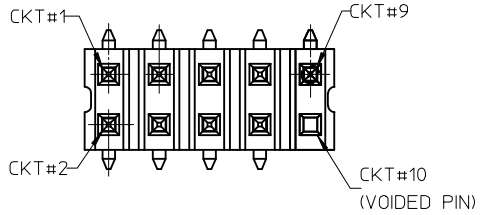


ADD. OPTION EC NO: S2009-0510 2009/01/23 DRWN:ATSEE 2009/02/09 CHKD:SKANG 2009/02/17 APPR:MLONG	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY KSEE	DATE 2003/12/12	TITLE CUSTOM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

EMBOSSSED CARRIER TAPE TYPE "C"

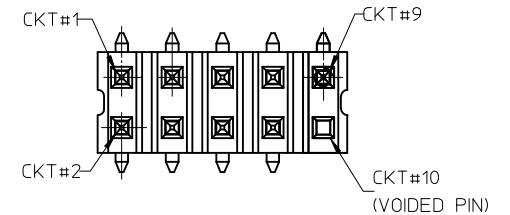


ADD. OPTION EC NO: S2009-0510 DRAWN ATSEE CHK'D:SKANG APPR:MLONG 2009/01/23 2009/02/09 2009/02/17	DESCRIPTION B2	REV	QUALITY SYMBOLS ▽=0 ⊕=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	⊙ ⊞ THIRD ANGLE PROJECTION				
				4 PLACES	± ---	± ---	DRAWN BY KSEE	DATE 2003/12/12	CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT						
				3 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2004/01/12							
				2 PLACES	± 0.2	± ---	APPROVED BY SKTOH	DATE 2004/01/12						MOLEX MOLEX INCORPORATED	
				1 PLACE	± ---	± ---	ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.			SHEET NO. 5 OF 6	
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE			SD-87759-117					
				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			
D	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			
	87759-1814	87759-1864	87759-1874	18	--	17.90	16.00	18.20	14.20	28.40	32.00	B			
C	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			
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			
A	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			
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			
B	87759-4414	87759-4464	87759-4474	44	--	43.90	42.00	44.20	26.20	52.40	56.00	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			
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 DRWN:ATSEE CHYD:SKANG APPR:MLONG 2009/01/23 2009/02/09 2009/02/17					DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
							▽=0 ◻=0		MM ONLY		NTS	METRIC		
									mm INCH		TITLE			
									4 PLACES ± --- ± ---	KSEE 2003/12/12	CUSTOM HEADER			
									3 PLACES ± --- ± ---	CHECKED BY DATE	MGRID, 2MM DUAL ROW HDR.			
	B2	REV	2 PLACES ± 0.2 ± ---	KCL ING 2004/01/12	SMT									
			1 PLACE ± --- ± ---	APPROVED BY DATE	MOLEX MOLEX INCORPORATED									
			ANGULAR ± 3 °		SKTOH 2004/01/12	DOCUMENT NO.		SHEET NO.						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		SD-87759-117		6 OF 6					
					SEE TABLE		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				