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Part Number: [0878321016](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 10 Circuits, 0.38µm (15µ") Gold (Au) Plating, without Locking Window, Center Polarization Slot, Cap, without PCB Locator, Tube

Documents:

[3D Model](#) [Product Specification PS-87831-027 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

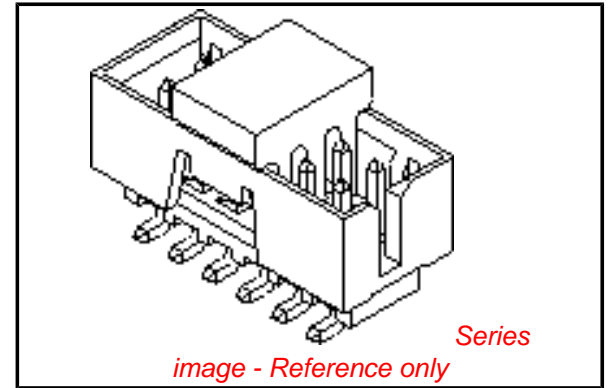
Product Family	PCB Headers
Series	87832
Application	Wire-to-Board
Comments	With Cap Contact Molex for application in automotive industry
Overview	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	No
Circuits (Loaded)	10
Circuits (maximum)	10
Color - Resin	Black
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	Yes
Lock to Mating Part	No
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
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.88
Polarized to Mating Part	Side Slots (2)
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

Electrical

Current - Maximum per Contact	2A
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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

[87832Series](#)

Mates With

[50394](#) Wire-to-Board Terminals. [51110](#) Wire-to-Board Crimp Housing. [87568](#) Wire-to-Board IDT Housings. [79107](#) Board-to-Board Top Entry Through Hole Receptacle. [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle. L

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 1

Process Temperature max. C 260

Material Info

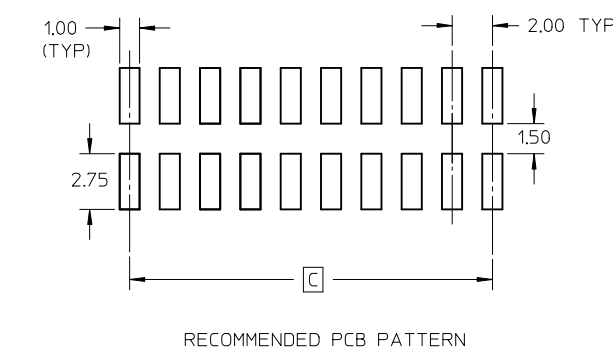
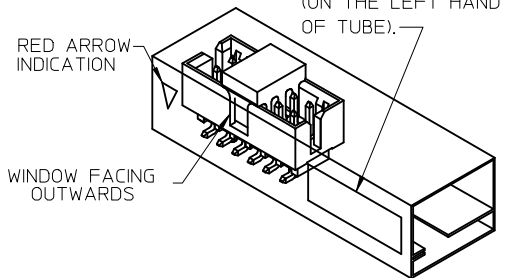
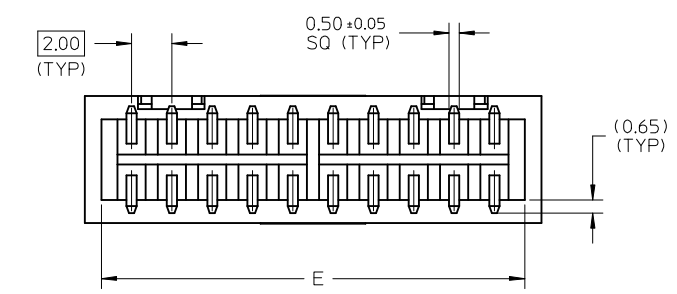
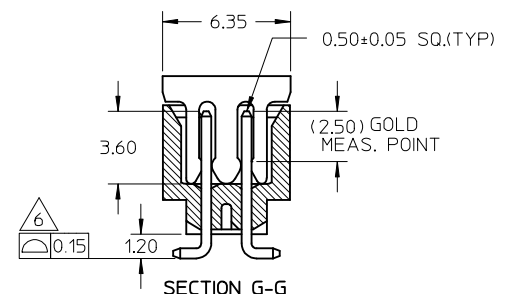
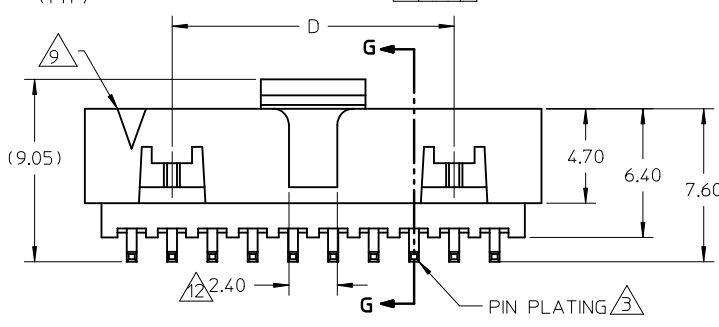
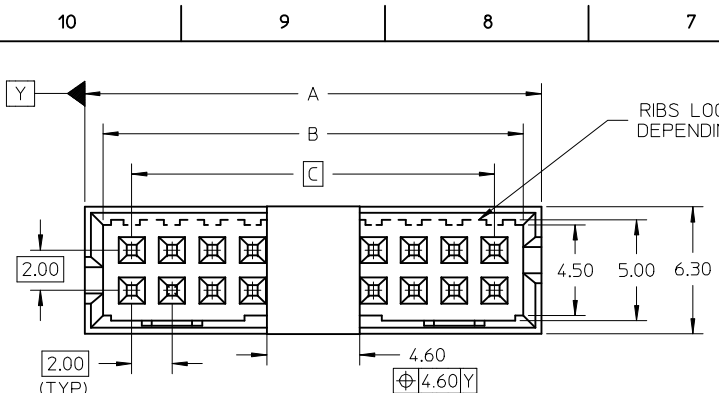
Reference - Drawing Numbers

Product Specification PS-87831-027

Sales Drawing SD-87832-008

This document was generated on 05/25/2010

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P/N	W/CAP IN TUBE	P/N	W/CAP IN T&R	P/N	W/O CAP IN TUBE	CKT SIZE	DIMENSION				
							A	B	C	D	E
87832-0616	87832-0614	87832-0612	87832-0612	6	8.65	6.85	4.00	---	7.00		
87832-0816	87832-0814	87832-0812	87832-0812	8	10.65	8.85	6.00	---	9.00		
87832-1416	87832-1414	87832-1412	87832-1412	14	16.65	14.85	12.00	8.00	15.00		
87832-1816	87832-1814	87832-1812	87832-1812	18	20.65	18.85	16.00	12.00	19.00		
87832-2016	87832-2014	87832-2012	87832-2012	20	22.65	20.85	18.00	14.00	21.00		
87832-2616	---	87832-2612	87832-2612	26	28.65	26.85	24.00	20.00	27.00		
87832-3016	87832-3014	87832-3012	87832-3012	30	32.65	30.85	28.00	24.00	31.00		
87832-3416	87832-3414	87832-3412	87832-3412	34	36.65	34.85	32.00	28.00	35.00		
87832-4016	---	87832-4012	87832-4012	40	42.65	40.85	38.00	34.00	41.00		
87832-5016	---	87832-5012	87832-5012	50	52.65	50.85	48.00	44.00	51.00		
87832-1016	87832-1014	87832-1012	87832-1012	10	12.65	10.85	8.00	---	11.00		
87832-1616	87832-1614	87832-1612	87832-1612	16	18.65	16.85	14.00	10.00	17.00		

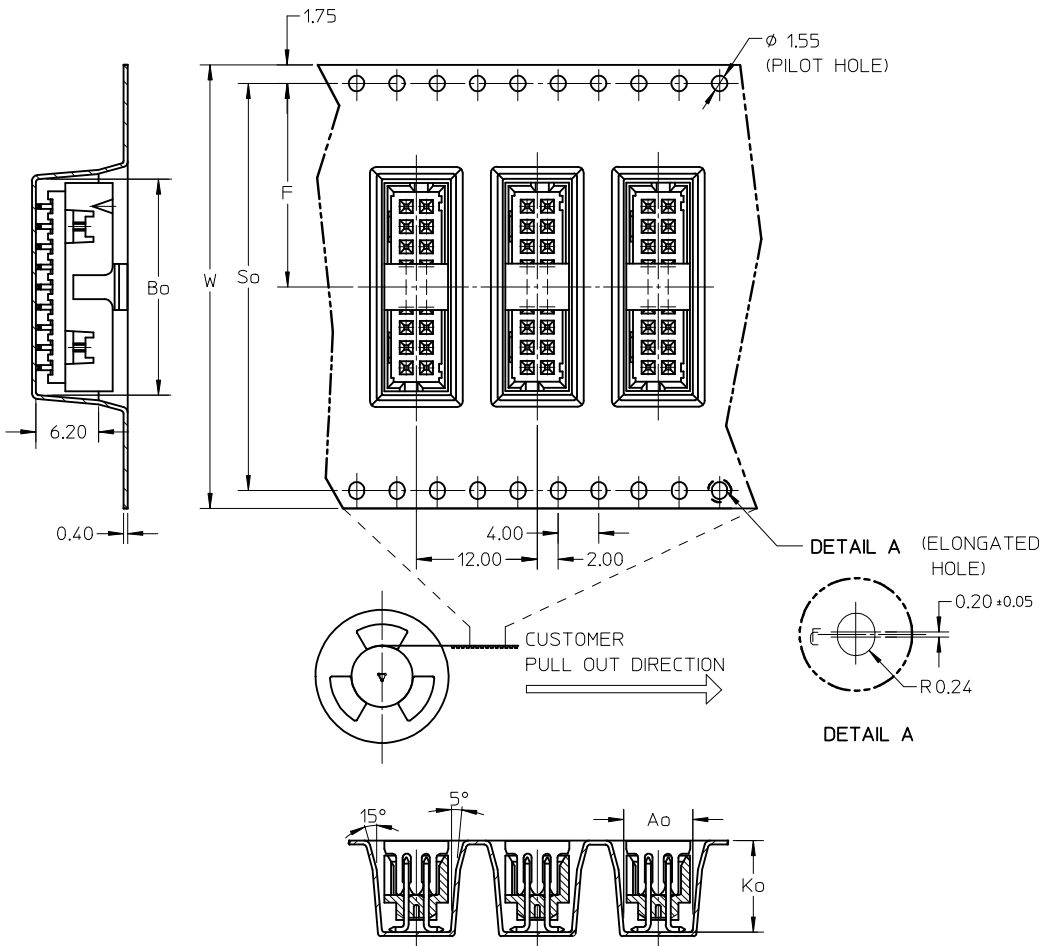
- NOTES:
- FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
 - MATERIAL :
HOUSING & CAP : NYLON 46, GLASS FILLED, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
 - PLATING:
0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
 - PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
 - PRODUCT SPECIFICATION PS-87831-027 APPLIES.
 - COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
 - BEND DEPRESSION ON SMT TAIL IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF THE TAIL.
 - NO SIDE LOCKING SLOT FROM 6, 8, AND 10 CKT SIZE.
 - CKT 4 & 6 HAS NO IDENTIFICATION TAG.
 - THIS HEADER MATES WITH MOLEX:
 - CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
 - 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
 - PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG WITH DESICCANT GEL.
 - NO CENTRE POLARIZATION SLOT FOR CKT SIZE 6

REF : ORIENTATION OF PART IN TUBE,
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)

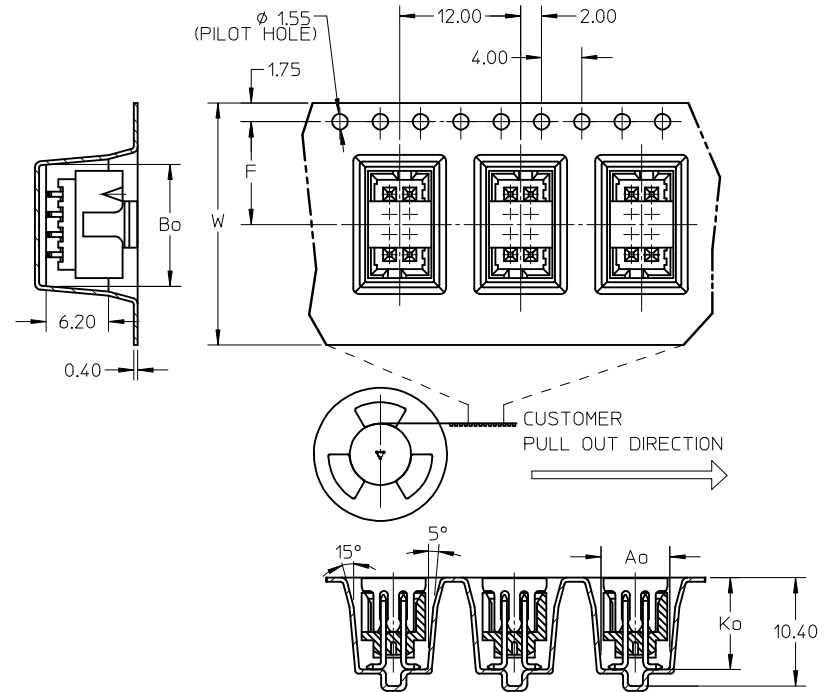
ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN:YCHONG CHKD:SKANG APPR:MLONG 2009/07/01 2009/07/08 2009/07/16	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	ATSEE	2003/10/14	MGRID, SHROUDED HEADER W/CAP, IN TUBE AND T&R SMT			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.2	± ---	KCLING	2003/11/07	MOLEX INCORPORATED					
1 PLACE	± ---	± ---	APPROVED BY	DATE						
ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SKTOH	2003/11/07	DOCUMENT NO.		SHEET NO.		
SEE TABLE		SEE TABLE		SD-87832-008		1 OF 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

P/N W/CAP IN T&R	CKT SIZE	W	F	Bo	So	Ao	Ko	TYPE	T&R QUANTITY (PCS/REEL)
87832-0614	06	24.00	11.50	9.15	-	6.40	9.30	A	500
87832-0814	08	24.00	11.50	11.05	-	6.40	9.30	A	
87832-1014	10	24.00	11.50	13.05	-	6.40	9.30	A	
87832-1414	14	32.00	14.20	17.05	28.40	6.40	9.30	C	
87832-1614	16	32.00	14.20	19.05	28.40	6.40	9.30	C	
87832-1814	18	44.00	20.20	21.05	40.40	6.40	9.30	B	
87832-2014	20	44.00	20.20	23.05	40.40	6.40	9.30	C	
87832-3014	30	44.00	20.20	33.05	40.40	6.40	9.30	B	
87832-3414	34	56.00	26.20	37.05	52.40	6.40	9.30	B	

EMBOSSED CARRIER TAPE 'B'

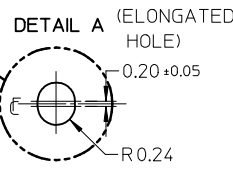
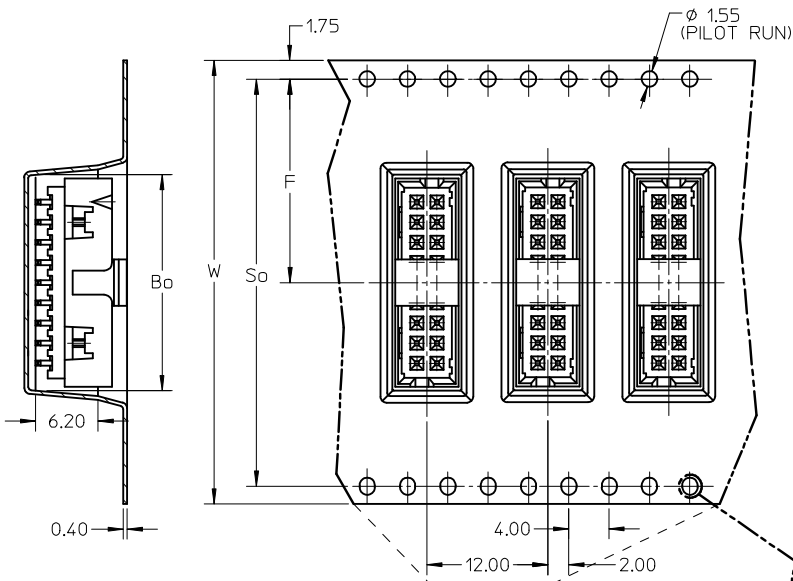


EMBOSSED CARRIER TAPE 'A'



ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN: YMCHONG CHKD: SKANG APPR: MLONG	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY ATSEE	DATE 2003/10/14	TITLE MGRID, SHROUDED HEADER W/CAP, IN TUBE AND T&R SMT			
		4 PLACES	± ---	± ---	CHECKED BY KCL ING	DATE 2003/11/07	MOLEX INCORPORATED			
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2003/11/07	DOCUMENT NO. SD-87832-008			
			2 PLACES	± 0.2	± ---	SHEET NO. 2 OF 3				
			1 PLACE	± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			ANGULAR ± 3 °		MATERIAL NO. SEE TABLE					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							

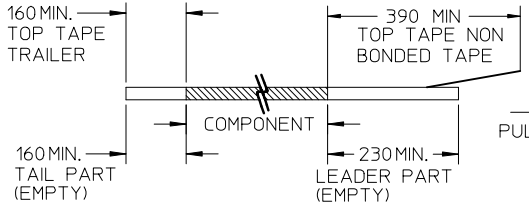
EMBOSSED CARRIER TAPE 'C'



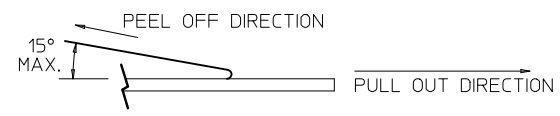
CUSTOMER PULL OUT DIRECTION

NOTES:

1. LEADER AND TRAILER TAPE



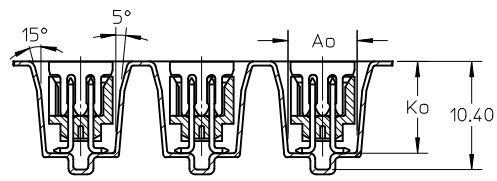
2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



3. PACKAGING STANDARD IS AS PER EIA-481.

4. TAPE AND REEL QUANTITY = SEE TABLE ON SHEET 2

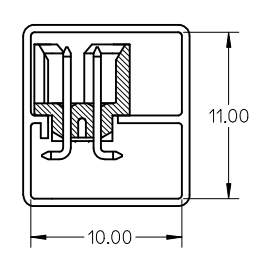
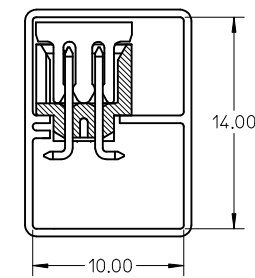
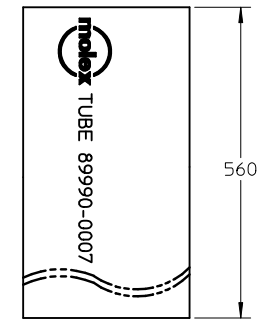
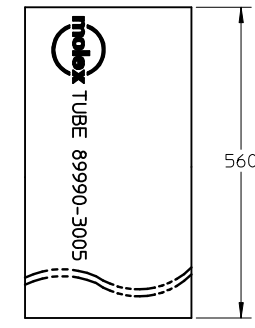
5. THE TAPE IS TREATED FOR ANTI-STATIC.



P/N W/CAP IN TUBE TUBE : 89990-3005	P/N W/O CAP IN TUBE TUBE : 89990-0007
87832-0616	87832-0612
87832-0816	87832-0812
87832-1416	87832-1412
87832-1816	87832-1812
87832-2016	87832-2012
87832-2616	87832-2612
87832-3016	87832-3012
87832-3416	87832-3412
87832-4016	87832-4012
87832-5016	87832-5012
87832-1016	87832-1012
87832-1616	87832-1612

ASSY WITH CAP TUBE

ASSY WITHOUT CAP IN TUBE



ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN:YMCHEONG CHKD:SKANG APPR:MLONG	2009/07/01	2009/07/08	2009/07/16
	DESCRIPTION		
	REV		
	B4		

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ± ---	± ---
◻=0	3 PLACES ± ---	± ---
	2 PLACES ± 0.2	± ---
	1 PLACE ± ---	± ---
	ANGULAR ± 3 °	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
ATSEE	2003/10/14	MGRID, SHROUDED HEADER W/CAP, IN TUBE AND T&R SMT		
CHECKED BY	DATE	MOLEX INCORPORATED		
KCL ING	2003/11/07	DOCUMENT NO. SD-87832-008		
APPROVED BY	DATE	SHEET NO. 3 OF 3		
SKTOH	2003/11/07	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
MATERIAL NO.	SEE TABLE			
SIZE	A3			