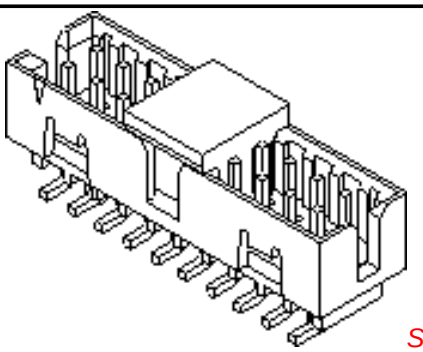
This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878321616
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 16 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Locking Windows, Center Polarization Slot, Cap, without PCB Locator, Tube



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-87831-027 (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)	16
Circuits (maximum)	16
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	Yes
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

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
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

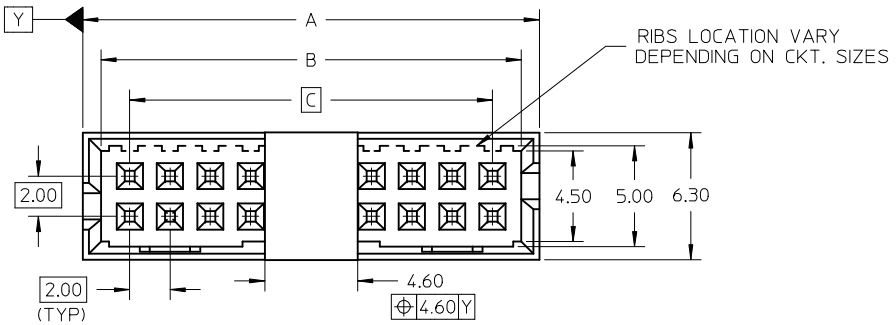
Material Info

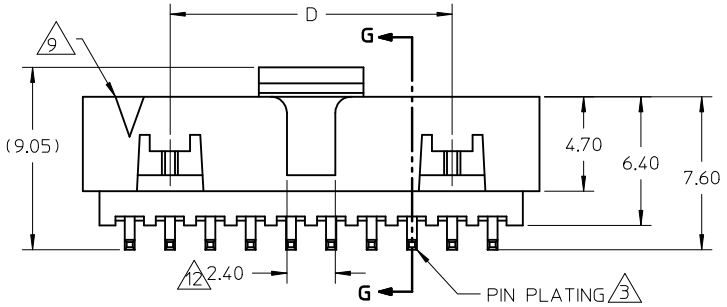
Reference - Drawing Numbers

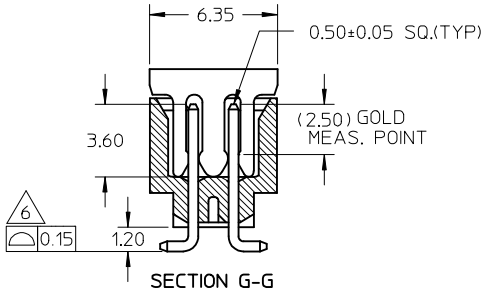
Product Specification	PS-87831-027
Sales Drawing	SD-87832-008

This document was generated on 05/25/2010

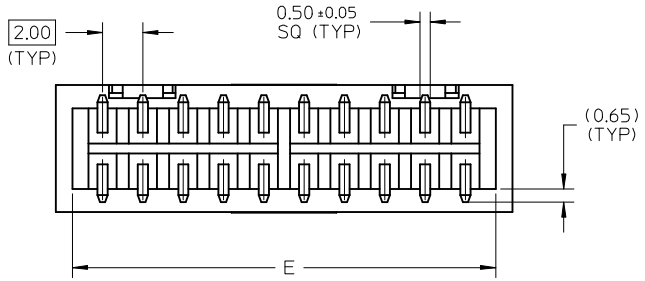
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

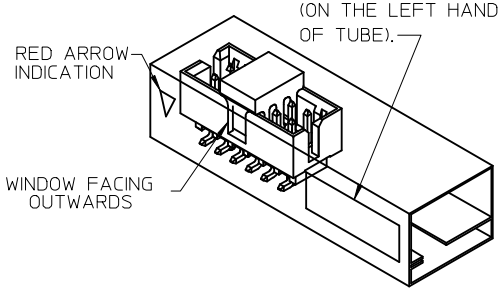




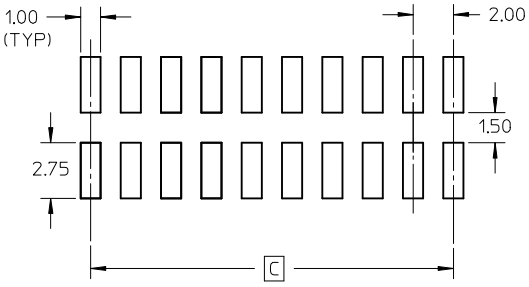


P/N W/CAP IN TUBE	P/N W/CAP IN T&R	P/N W/O CAP IN TUBE	CKT SIZE	DIMENSION				
				A	B	C	D	E
87832-0616	87832-0614	87832-0612	6	8.65	6.85	4.00	——	7.00
87832-0816	87832-0814	87832-0812	8	10.65	8.85	6.00	——	9.00
87832-1416	87832-1414	87832-1412	14	16.65	14.85	12.00	8.00	15.00
87832-1816	87832-1814	87832-1812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





NOTES:
1. FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING & CAP : NYLON 46, GLASS FILLED, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
3. 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.
4. PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
5. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
6. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
7. BEND DEPRESSION ON SMT TAIL IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF THE TAIL.
8. NO SIDE LOCKING SLOT FROM 6, 8, AND 10 CKT SIZE.
9. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
10. THIS HEADER MATES WITH MOLEX:
    a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
    b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
11. PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG WITH DESICCANT GEL.
12. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 6



RECOMMENDED PCB PATTERN

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

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

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: ATSEE	DATE: 2003/10/14
CHECKED BY: KCLING	DATE: 2003/11/07
APPROVED BY: SKTOH	DATE: 2003/11/07

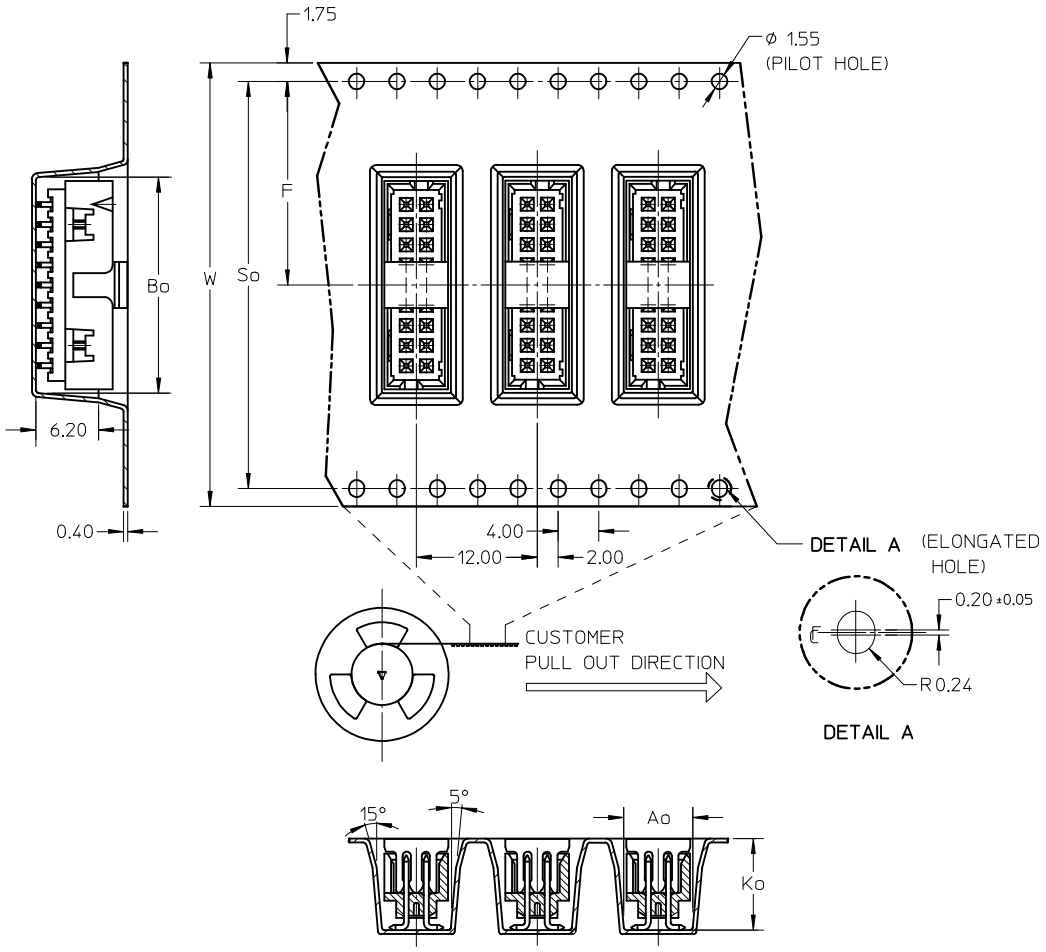
TITLE: MGRID, SHROUDED HEADER W/CAP, IN TUBE AND T&R SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-008
SHEET NO.: 1 OF 3
SIZE: A3

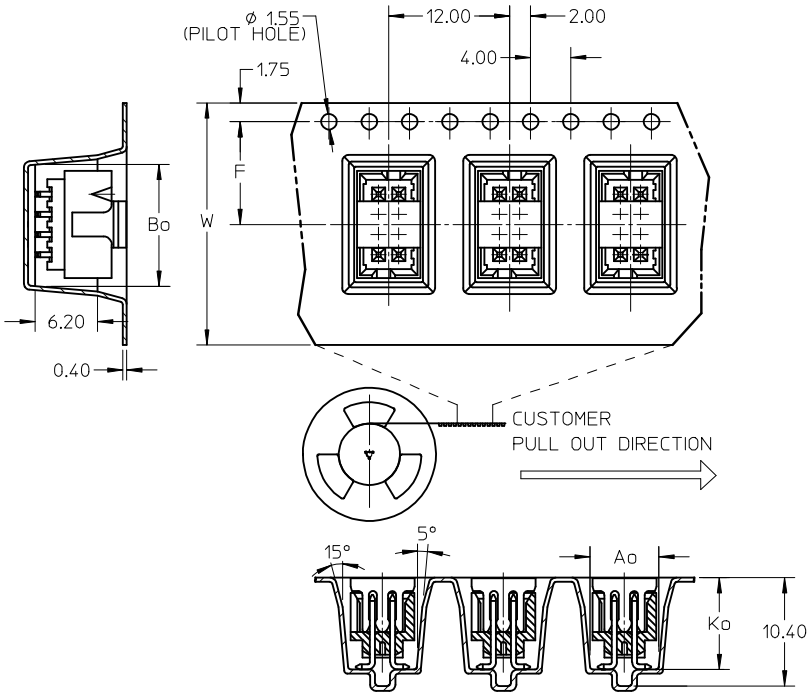
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

EMBOSSED CARRIER TAPE 'B'



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 'A'



ADD IN NOTES NO.12
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DRWN:YMCHONG 2009/07/08
CH'KD:SKANG
APPR:MLONG 2009/07/16
DESCRIPTION
REV
B4

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: ATSEE DATE: 2003/10/14
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07

TITLE: MGRID, SHROUDED HEADER W/CAP, IN TUBE AND T&R SMT

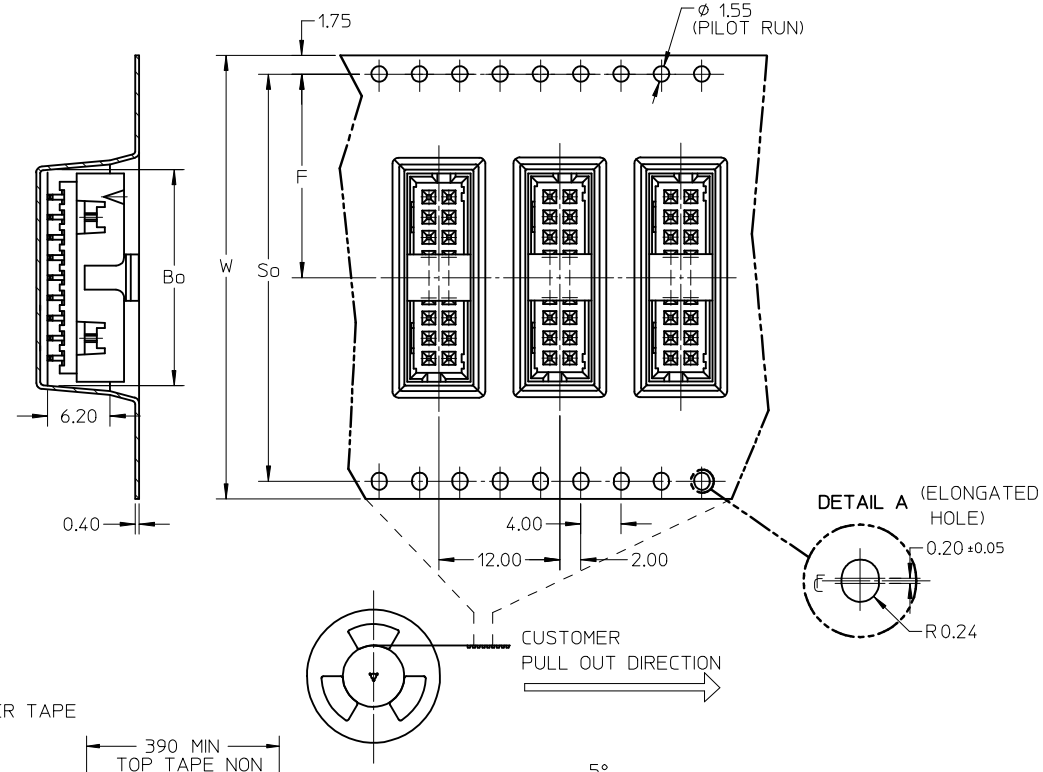
MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-008
SHEET NO.: 2 OF 3
SIZE: A3

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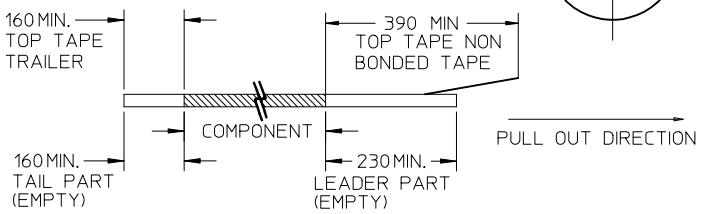
P/N W/CAP IN TUBE TUBE : 89990-3005	P/N W/O CAP IN TUBE TUBE : 89990-0007
87832-0616	87832-0612
87832-0816	87832-0812
87832-1416	87832-1412
87832-1816	87832-1812
87832-2016	87832-2012
87832-2616	87832-2612
87832-3016	87832-3012
87832-3416	87832-3412
87832-4016	87832-4012
87832-5016	87832-5012
87832-1016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

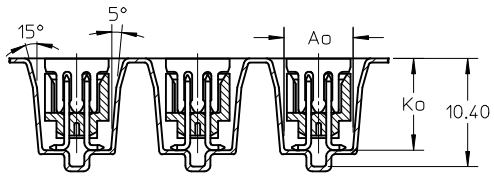
EMBOSSED CARRIER TAPE 'C'



NOTES:

1. LEADER AND TRAILER TAPE





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

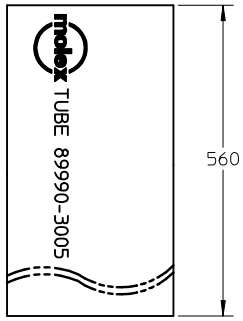


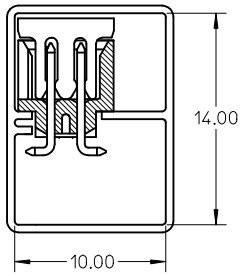
3. PACKAGING STANDARD IS AS PER EIA-481.

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

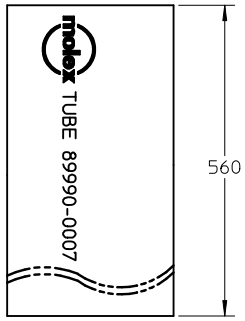
5. THE TAPE IS TREATED FOR ANTI-STATIC.

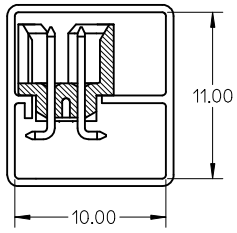
ASSY WITH CAP TUBE





ASSY WITHOUT CAP IN TUBE





ADD IN NOTES NO.12
EC NO: S2009-0943 2009/07/01
DRWN:YMCHONG 2009/07/08
CH'KD:SKANG 2009/07/16
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B4

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MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-008
SHEET NO.: 3 OF 3
SIZE: A3

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