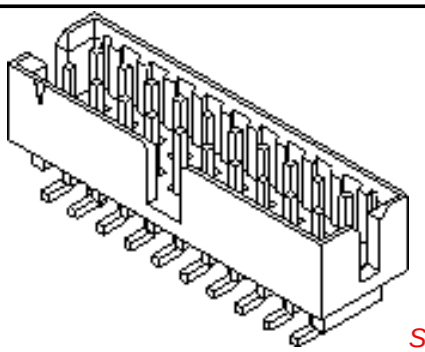
This document was generated on 05/25/2010

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Part Number: 0878322021
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 20 Circuits, 0.76µm (30µ") Gold (Au) Plating, with Locking Windows and Center Polarization Slot, PCB Locator, Tube



Series image - Reference only

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	87832
Application	Wire-to-Board
Comments	Without Cap; Contact Molex for application in automotive industry
Overview	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
First Mate / Last Break	No
Flammability	94V-0
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	Yes
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)	30
Plating min: Mating (µm)	0.76
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

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not Halogen-Free

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

Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

Electrical

Current - Maximum per Contact	2A
Voltage - Maximum	125V

Solder Process Data

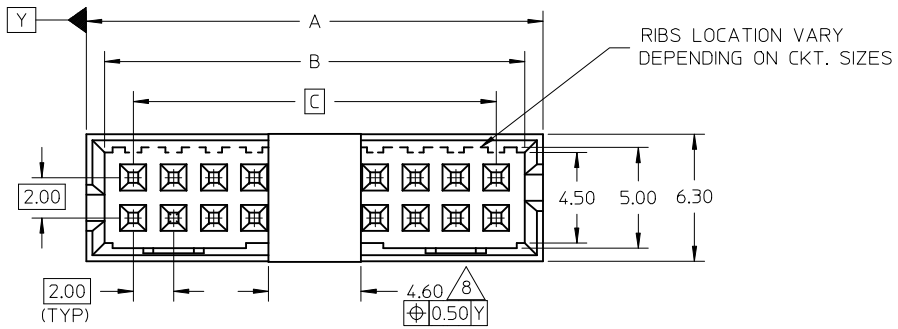
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

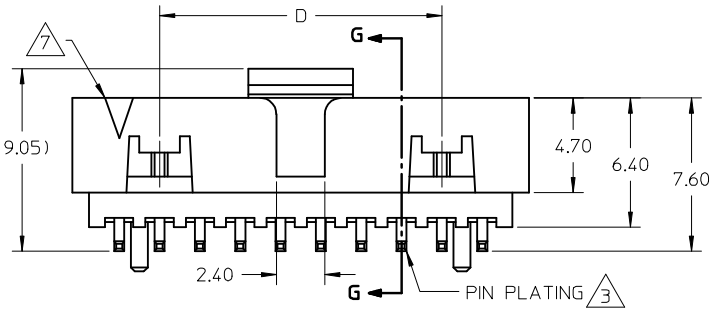
Material Info

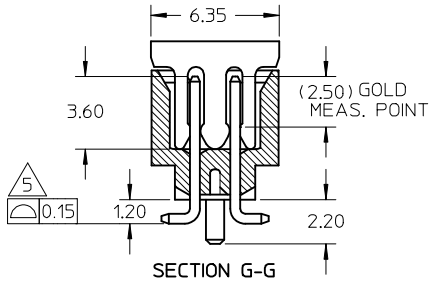
Reference - Drawing Numbers

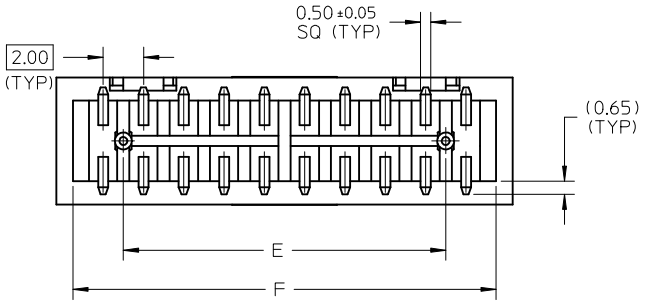
Product Specification	PS-87831-027
Sales Drawing	SD-87832-007

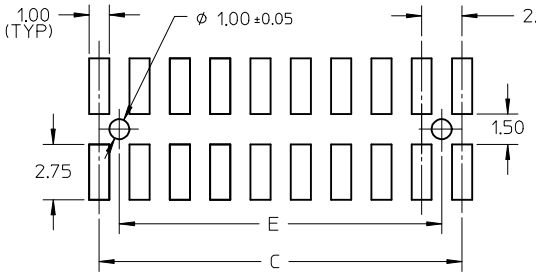
This document was generated on 05/25/2010
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION











RECOMMENDED PCB PATTERN

CKT SIZE	DIMENSION					
	A	B	C	D	E	F
4	6.65	4.85	2.00	——	——	5.00
6	8.65	6.85	4.00	——	2.00	7.00
8	10.65	8.85	6.00	——	4.00	9.00
10	12.65	10.85	8.00	——	6.00	11.00
12	14.65	12.85	10.00	——	8.00	13.00
14	16.65	14.85	12.00	8.00	10.00	15.00
16	18.65	16.85	14.00	10.00	12.00	17.00
18	20.65	18.85	16.00	12.00	14.00	19.00
20	22.65	20.85	18.00	14.00	16.00	21.00
22	24.65	22.85	20.00	16.00	18.00	23.00
24	26.65	24.85	22.00	18.00	20.00	25.00
26	28.65	26.85	24.00	20.00	22.00	27.00
28	30.65	28.85	26.00	22.00	24.00	29.00
30	32.65	30.85	28.00	24.00	26.00	31.00
32	34.65	32.85	30.00	26.00	28.00	33.00
34	36.65	34.85	32.00	28.00	30.00	35.00
36	38.65	36.85	34.00	30.00	32.00	37.00
38	40.65	38.85	36.00	32.00	34.00	39.00
40	42.65	40.85	38.00	34.00	36.00	41.00
42	44.65	42.85	40.00	36.00	38.00	43.00
44	46.65	44.85	42.00	38.00	40.00	45.00
46	48.65	46.85	44.00	40.00	42.00	47.00
48	50.65	48.85	46.00	42.00	44.00	49.00
50	52.65	50.85	48.00	44.00	46.00	51.00

ADD 34CKT T&R P/N
EC NO: S2009-0642 2009/03/11
DRWN:SKANG 2009/03/11
CH'KD:ATSEE 2009/03/18
APPR:MLONG
DESCRIPTION
A9
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: ATSEE DATE: 2003/10/14
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07

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

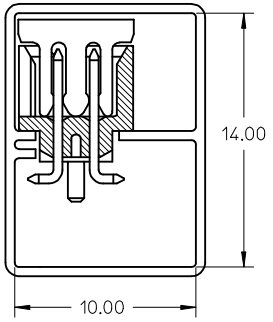
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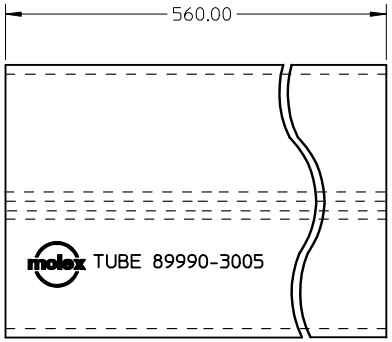
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-007
SHEET NO.: 1 OF 4
SIZE: A3

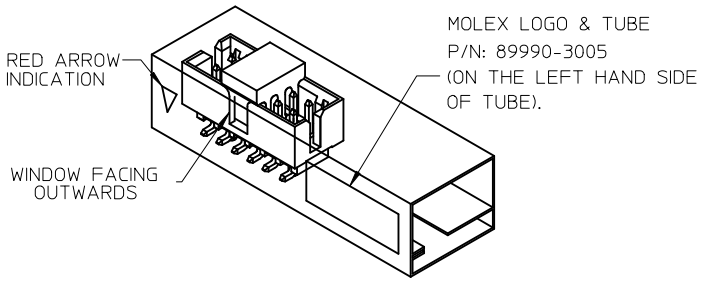
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WITH CAP

TUBE PACKAGING







REF : ORIENTATION OF PART IN TUBE.

(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)

ADD 34CKT T&R P/N							
EC NO: S2009-0642	2009/03/11						
DRWN:SKANG	2009/03/11						
CH'KD:ATSEE	2009/03/11						
APPR:MLONG	2009/03/18						
DESCRIPTION							
A9	REV						

QUALITY SYMBOLS

▼=0

Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

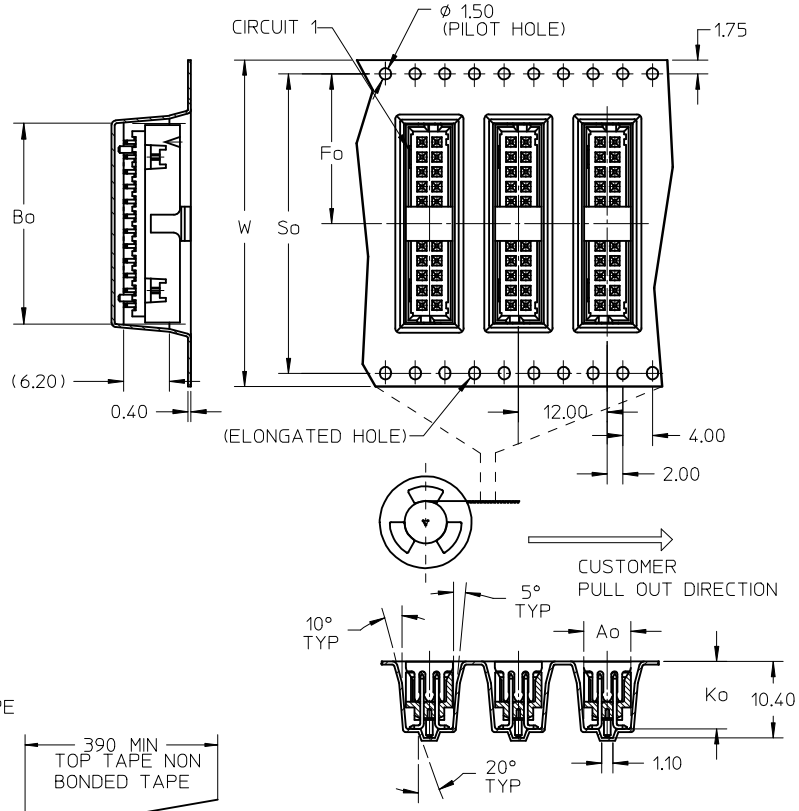
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY	SCALE: NTS	DESIGN UNITS: METRIC	THIRD ANGLE PROJECTION
DRAWN BY: ATSEE	DATE: 2003/10/14	TITLE: MGRID, SHROUDED HEADER SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R	
CHECKED BY: KCLING	DATE: 2003/11/07		
APPROVED BY: SKTOH	DATE: 2003/11/07	molex MOLEX INCORPORATED	
MATERIAL NO.: SEE TABLE		DOCUMENT NO.: SD-87832-007	SHEET NO.: 2 OF 4
SIZE: A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

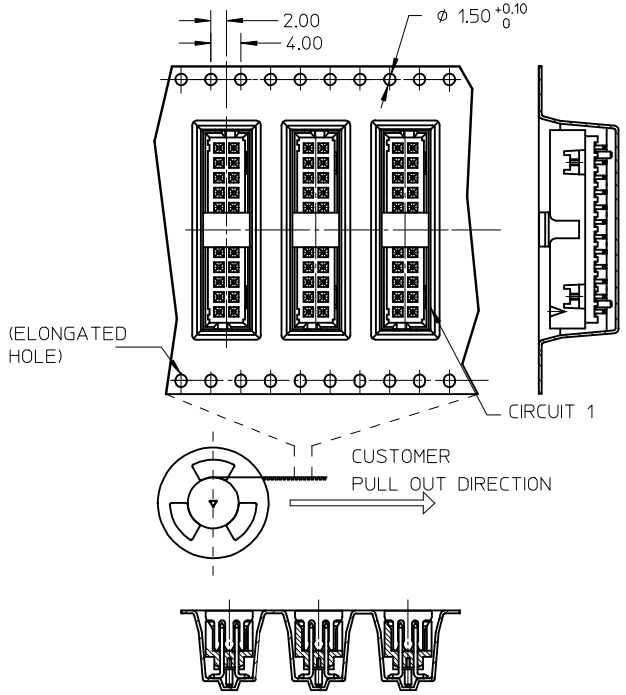
EMBOSSED CARRIER TAPE LAYOUT OPTION A

24 CKT USE FOR ILLUSTRATION ONLY



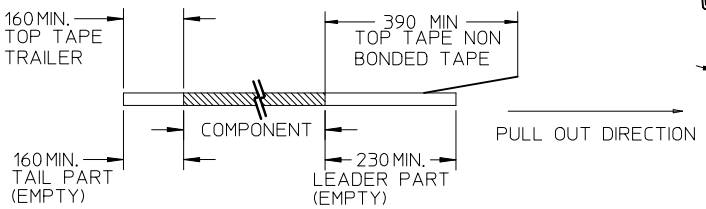
EMBOSSED CARRIER TAPE LAYOUT OPTION B

24 CKT USE FOR ILLUSTRATION ONLY

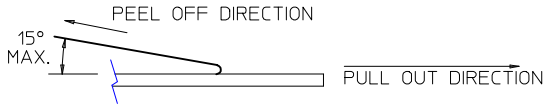


NOTES:

1. LEADER AND TRAILER TAPE



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



3. PACKAGING STANDARD IS AS PER EIA-481.

ADD 34CKT T&R P/N
EC NO: S2009-0642 2009/03/11
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CH'KD:ATSEE 2009/03/18
APPR:MLONG
DESCRIPTION
REV
A9

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 SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-007
SHEET NO.: 3 OF 4
SIZE: A3

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PLS REFER TO PART 87832-**09 FOR CENTER LOCKING SLOT OPTION.

PEG OPTION	P/N W/O CAP IN TUBE	P/N W/CAP IN TUBE (SHEET 2)	P/N W/CAP TAPE & REEL (SHEET 3)	CKT SIZE	DIMENSION						PACKAGING OPTION (SHEET 3)
					W	Fo	Bo	So	Ao	Ko	
NO	87832-0421	87832-0423	87832-5123	04	16.00	7.50	7.15	-	6.40	9.30	A
YES	87832-0621	87832-0623	87832-5223	06	24.00	11.50	9.15	-	6.40	9.30	A
YES	87832-0821	87832-0823	87832-5323	08	24.00	11.50	11.05	-	6.40	9.30	A
YES	87832-1021	87832-1023	87832-5423	10	24.00	11.50	13.05	-	6.40	9.30	A
YES	87832-1221	87832-1223	87832-5523	12	32.00	14.20	15.15	28.40	6.40	9.30	A
YES	87832-1421	87832-1423	87832-5623	14	32.00	14.20	17.05	28.40	6.40	9.30	A
YES	87832-1621	87832-1623	87832-5723	16	32.00	14.20	19.05	28.40	6.40	9.30	A
YES	87832-1821	87832-1823	87832-5823	18	44.00	20.20	21.05	40.40	6.40	9.30	A
YES	87832-2021	87832-2023	87832-5923	20	44.00	20.20	23.05	40.40	6.40	9.30	A
YES	87832-2221	87832-2223	87832-6023	22	44.00	20.20	25.05	40.40	6.40	9.30	A
YES	87832-2421	87832-2423	87832-6123	24	44.00	20.20	27.05	40.40	6.40	9.30	A
YES	87832-2621	87832-2623	87832-6223	26	44.00	20.20	29.05	40.40	6.40	9.30	A
YES	87832-2821	87832-2823	87832-6323	28	56.00	26.20	31.05	52.40	6.40	9.30	A
YES	87832-3021	87832-3023	87832-6423	30	56.00	26.20	33.05	52.40	6.40	9.30	A
YES	87832-3221	87832-3223	--	32	--	--	--	--	--	--	-
YES	87832-3421	87832-3423	87832-6623	34	56.00	26.20	37.05	52.40	6.40	9.30	A
YES	87832-3621	87832-3623	--	36	--	--	--	--	--	--	-
YES	87832-3821	87832-3823	--	38	--	--	--	--	--	--	-
YES	87832-4021	87832-4023	87832-6923	40	56.00	26.20	43.05	52.40	6.40	9.30	A
YES	87832-4221	87832-4223	--	42	--	--	--	--	--	--	-
YES	87832-4421	87832-4423	87832-7123	44	56.00	26.20	46.80	52.40	6.40	9.30	A
YES	87832-4621	87832-4623	--	46	--	--	--	--	--	--	-
YES	87832-4821	87832-4823	--	48	--	--	--	--	--	--	-
YES	87832-5021	87832-5023	87832-7423	50	72.00	34.20	53.05	68.40	6.40	9.30	A
YES	--	--	87832-9423	10	24.00	11.50	13.05	-	6.40	9.30	B

NOTES:
1. FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING & CAP : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
3. PLATING : 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
4. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
5. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
6. NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
7. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
8. POSITION OF CAP TO BE LOCATED AT CENTER OF DIMENSION 'A' REGARDLESS OF CIRCUIT SIZE.
9. TOP SURFACE OF CAP TO BE FLAT FOR THE PURPOSE OF PICK-&-PLACE BY VACUUM SUCTION NOZZLE.
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. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
12. PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.

ADD 34CKT T&R P/N
EC NO: S2009-0642 2009/03/11
DRWN:SKANG 2009/03/11
CH'KD:ATSEE 2009/03/18
APPR:MLONG
DESCRIPTION
A9
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
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1 PLACE	± ---	± ---
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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 SMT, W/PEGS/CAP FOR PICK & PLACE IN TUBE AND T&R

molex MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87832-007
SHEET NO.: 4 OF 4
SIZE: A3

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