

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0712513101](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch DIMM Socket, Vertical, Multiple Keys, Plastic Peg, 200 Circuits, 2.5V DDR, 10.00mm (.394") Latch Length

**Documents:**

[3D Model](#) [Product Specification PS-71243-9999 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Memory Module Sockets  
 Series [71251](#)  
 Comments Function Key Center, Voltage Key Center  
 Component Type Memory Module  
 JEDEC Outline MO-172  
 Product Name DDR DIMM, DIMM

**Physical**

Circuits (Loaded) 200  
 Color - Resin Black, Natural  
 Durability (mating cycles max) 25  
 Entry Angle Vertical (Top Entry)  
 Flammability 94V-0  
 Function Key Detail Y  
 Keying to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 PCB Retention Yes  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 2  
 Plating min: Mating (µm) 0.05  
 Plating min: Termination (µin) 150  
 Plating min: Termination (µm) 3.81  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 100V  
 Voltage Key Center

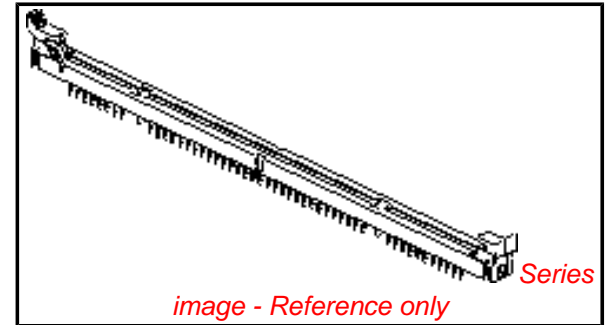
**Solder Process Data**

Lead-free Process Capability Wave Capable (TH only)

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-71243-9999  
 Sales Drawing SDA-71251-3\*\*\*\*



**EU RoHS**

**ELV and RoHS  
Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

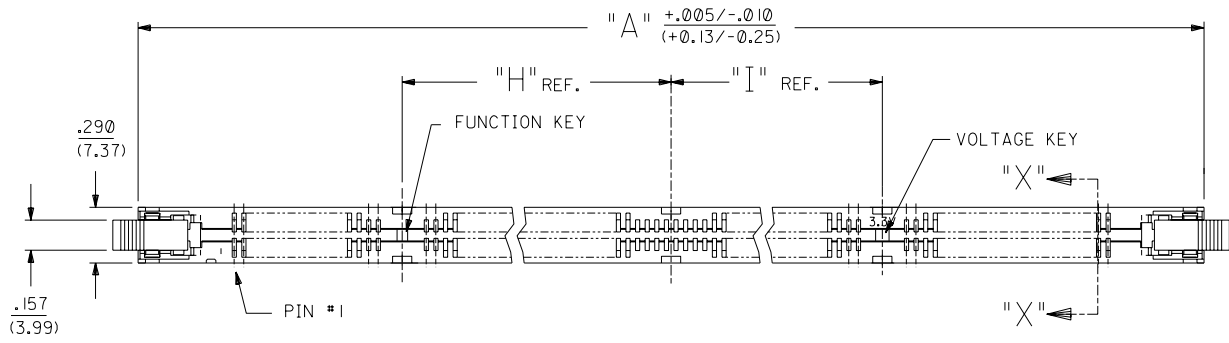
[71251Series](#)

**Mates With**

JEDEC MO-172 modules

This document was generated on 04/13/2010

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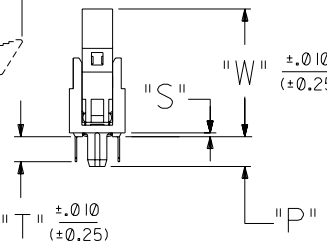
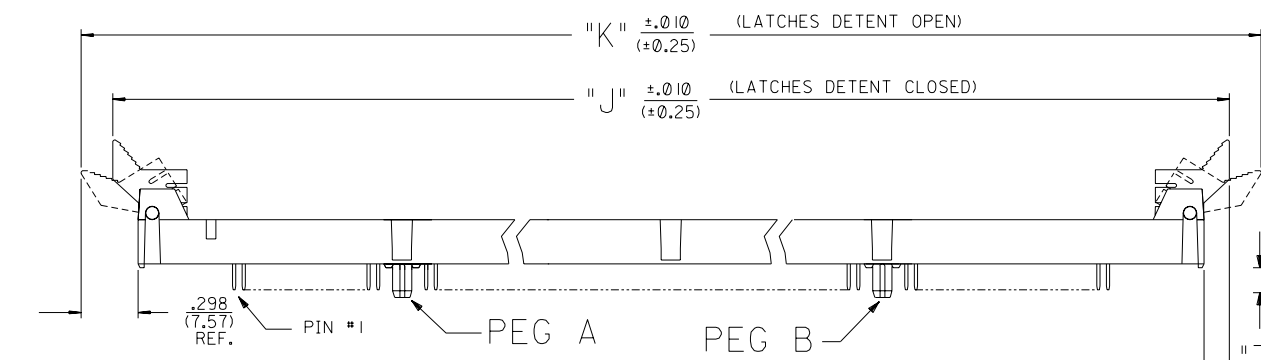
- NOTES:
- CARD SLOT ACCEPTS  $.050 \pm .004$  ( $1.27 \pm 0.10$ ) MODULE THICKNESS. (MEASURED OVER P.C. PADS).
  - ALL PEGS ARE INTERFERENCE FITS TO PCB UNLESS NOTED ON THE DWG.
  - REFER TO PRODUCT SPEC PS-71243-9999 FOR PERFORMANCE SPECS.
  - PRODUCT IS PACKAGED IN TRAYS.
  - RECOMMENDED MODULE LAYOUT SHALL BE PER SHEET 2.
  - RECOMMENDED PLATING ON MODULE PADS: 30 MICROMETER ( $0.76$  MICROMETER) MINIMUM HARD GOLD (Au) OVER 79 MICROMETER ( $2.0$  MICROMETER) MINIMUM NICKEL (Ni).
  - PRODUCT WILL HAVE DATE CODE STAMPED ON SIDE OF HOUSING.

MATERIALS:  
 HOUSING - GLASS FILLED LIQUID CRYSTAL POLYMER (LCP), UL 94V-0, COLOR: BLACK.  
 TERMINAL - PHOSPHOR BRONZE  
 LATCHES - GLASS FILLED HIGH TEMPERATURE NYLON, UL 94V-0, COLOR: IVORY.

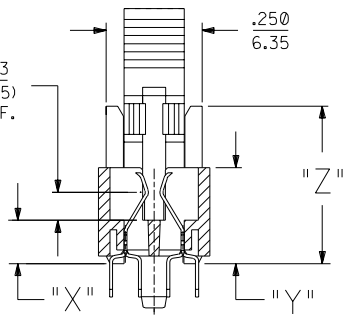
PLATING:  
 CONTACT AREA: GOLD (Au) FLASH: THICKNESS=2-10 MICROMETER ( $0.05$ - $0.25$  MICROMETER), OVER PALLADIUM-NICKEL (Pd-Ni): THICKNESS=30 MICROMETER ( $0.76$  MICROMETER) MINIMUM.  
 SOLDER TAILS: TIN (Sn): THICKNESS=150 MICROMETER ( $3.81$  MICROMETER) MINIMUM.

UNDERPLATE: NICKEL (Ni) OVER ENTIRE CONTACT.

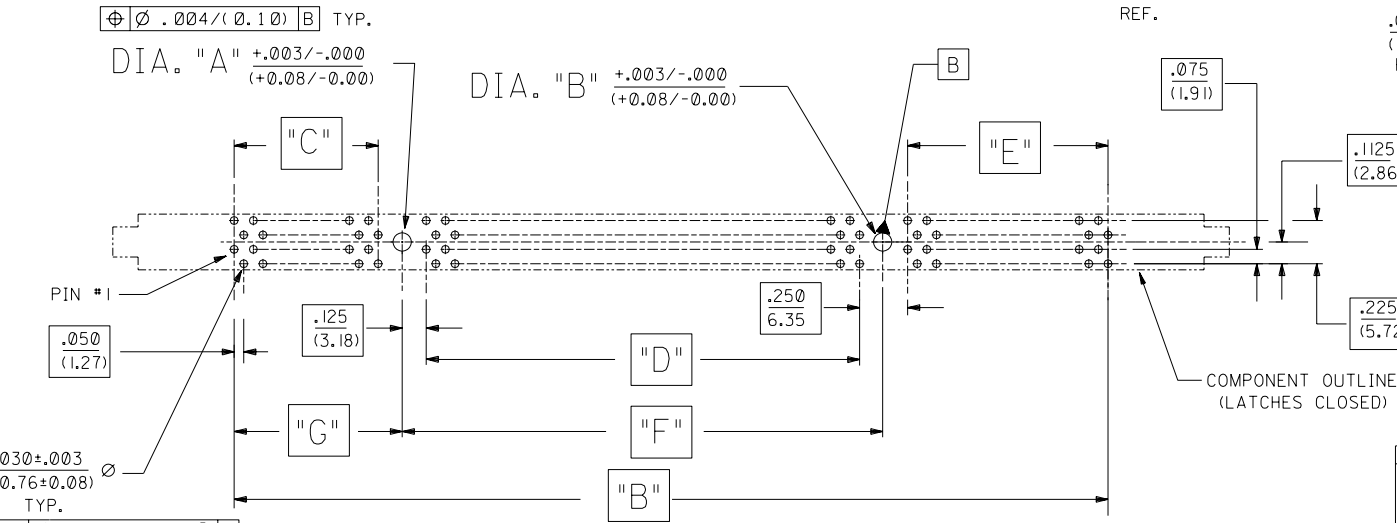
NOTE FOR LEAD FREE CONVERSION:  
 THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.



71251-3001 SHOWN



SCALE 4:1

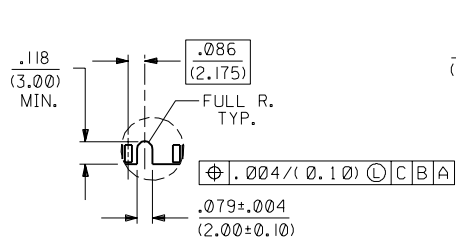


RECOMMENDED P.C. BOARD HOLE PATTERN (CONNECTOR SIDE)

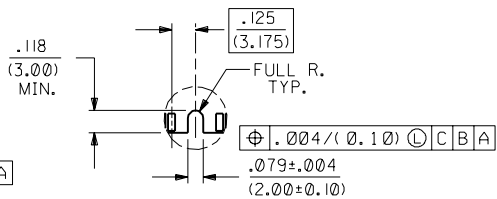
F1	ADD LEAD FREE NOTE ECN# UCP2004-1132 DMORGAN 04/03/09
F	CHG Sn-Pb THICKNESS ECN# UDT1999-0454 DMORGAN 99/08/09
E	ADD P/N -3001 ECN# UDT1999-0582 DMORGAN 99/01/25
D	ADD P/N -3001 ECN# UDT1999-0385 DMORGAN 98/11/25
C	REVISED PER ECR# U61133 96-9-25 LAURX
B	REVISED PER ECR# U51288 8-4-95 JCL
A	RMVD X, REVISED PER ECR# U50419 12-27-94 JCL
2	REVISED PER ECR# U50419 11-9-94 JCL
1	**X RELEASED PER ECR# U40711 10-20-94 JCL

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 1/2^\circ$		REVISE ONLY ON CAD SYSTEM	
3 PLAGE $\pm .005$	INCH	TITLE 0.050/(1.27) PITCH MULTI-KEY DIMM ASSEMBLY FOR SDRAM 10.0mm LATCH SALES DWG	
2 PLAGE $\pm .01$ $\pm 0.13$	METRIC	MOLEX INCORPORATED SHEET NO. DATE 1 OF 3 10/19/94	
1 PLAGE --- $\pm 0.25$		PART NO. DRWG. NO. SEE CHART SDA-71251-3***	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DRWG. BY: JCL	CHK'D. BY: DCB	FILE NAME: ST125131.DGN	SIZE: CP
APPR. BY:	SCALE: 2:1		

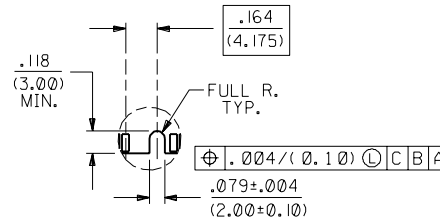
ITEM NUMBER 71251-3***	CKT SIZE	DESCRIPTION	FUNCTION KEY	VOLTAGE KEY	DIA. 'A'	DIA. 'B'	DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'	DIM. 'E'	DIM. 'F'	DIM. 'G'	DIM. 'H'	DIM. 'I'	DIM. 'J'	DIM. 'K'	DIM. 'L'	DIM. 'P'	DIM. 'S'	DIM. 'T'	DIM. 'W'	DIM. 'X'	DIM. 'Y'	DIM. 'Z'
-3001	200	3.3 VOLT LVTTL	CENTERED	CENTERED	.093 (2.36)	.093 (2.36)	6.350 (161.29)	5.350 (135.89)	.750 (19.05)	3.050 (77.47)	1.050 (26.67)	3.300 (83.82)	.875 (22.22)	1.800 (45.72)	1.500 (38.10)	6.614 (168.00)	6.946 (176.43)	6.050 (153.67)	.155 (3.94)	.020 (0.51)	.127 (3.23)	.664 (16.87)	.113 (2.87)	.250 (6.35)	.410 (10.41)
-3002	200	3.3 VOLT SDRAM	OFFSET LEFT	CENTERED	.093 (2.36)	.093 (2.36)	6.350 (161.29)	5.350 (135.89)	.750 (19.05)	3.050 (77.47)	1.050 (26.67)	3.300 (83.82)	.875 (22.22)	1.839 (46.72)	1.500 (38.10)	6.614 (168.00)	6.946 (176.43)	6.050 (153.67)	.155 (3.94)	.020 (0.51)	.127 (3.23)	.664 (16.87)	.113 (2.87)	.250 (6.35)	.410 (10.41)



OFFSET LEFT KEY



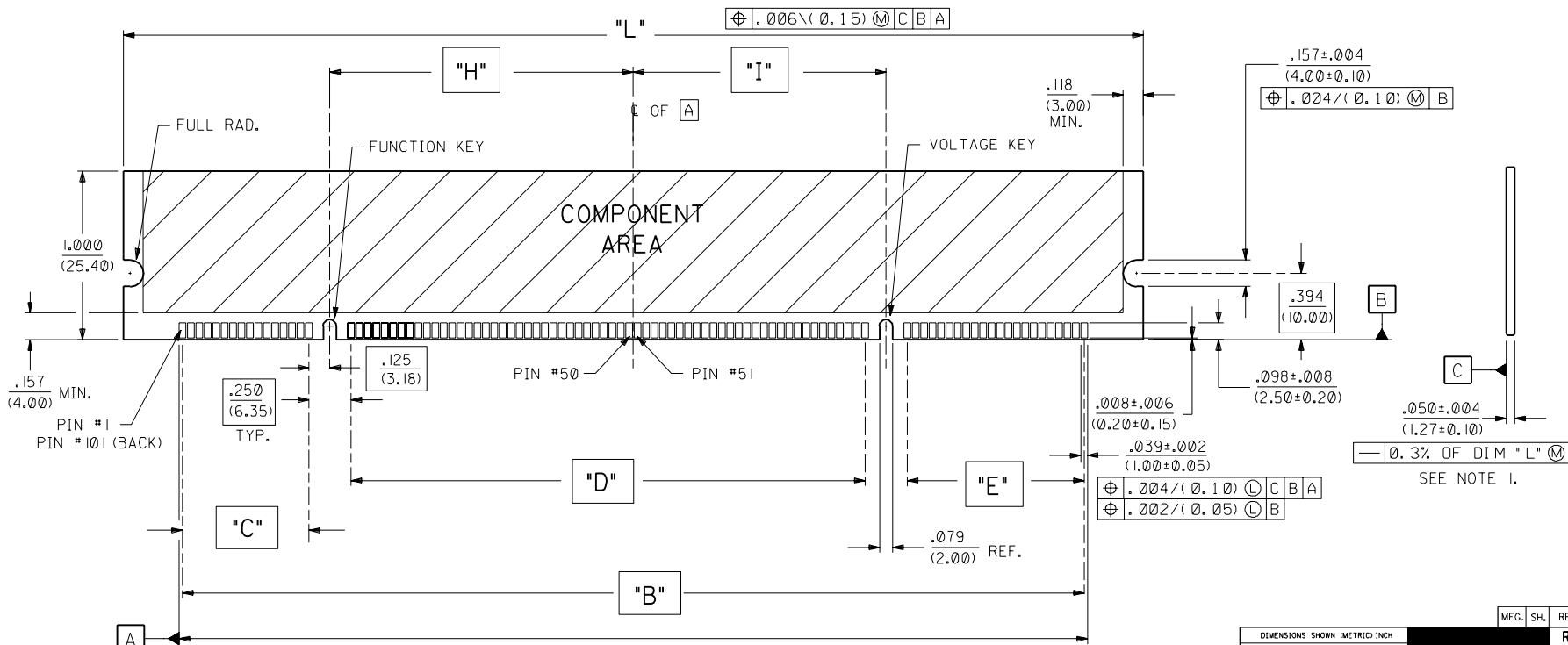
CENTERED KEY



OFFSET RIGHT KEY

NOTES:

1. STRAIGHTNESS OF MODULE APPLIES TO THE AREA FROM THE BOTTOM OF THE CARD UP .157/(4.00).
2. IF TIE BARS ARE ATTACHED TO PADS, THE TIE BAR SHOULD BE ON AN INTERNAL LAYER, SO THAT THE REMNANT CANNOT CAUSE DAMAGE TO THE CONTACTS.



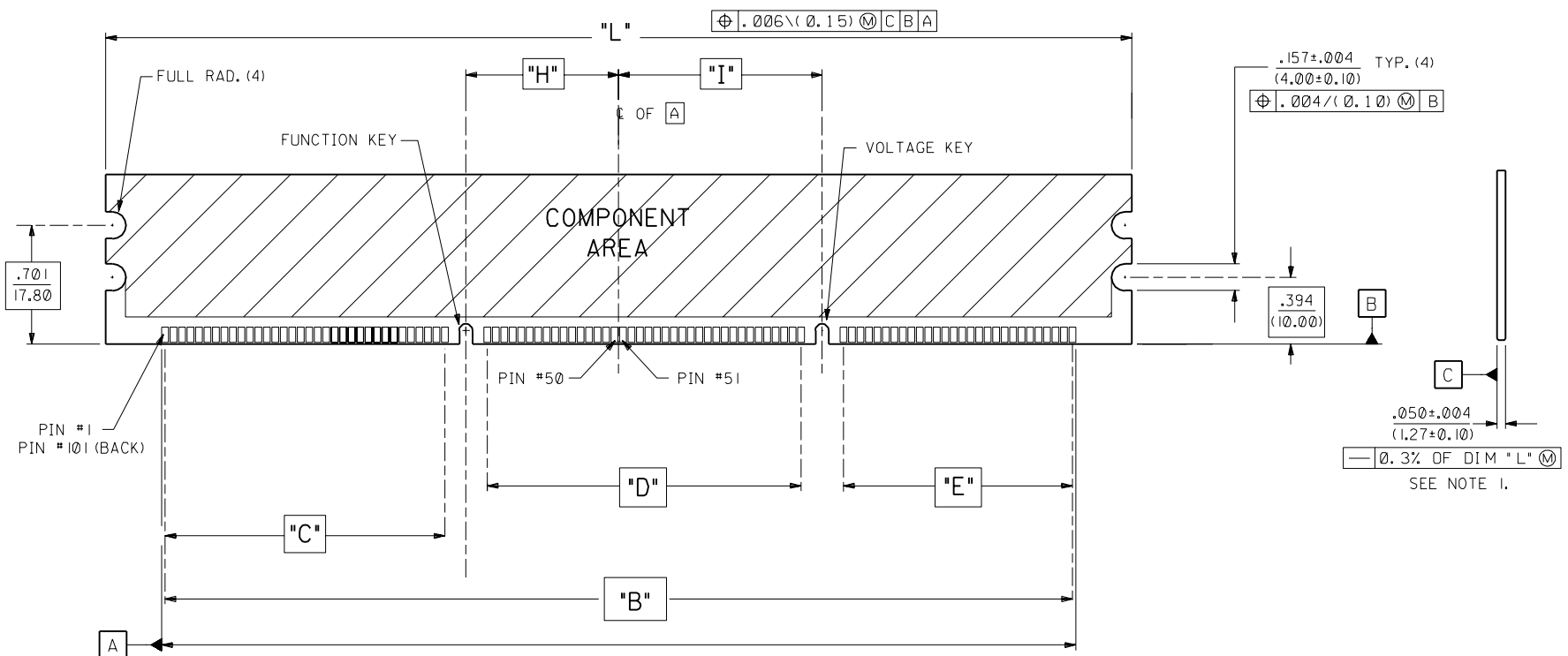
RECOMMENDED MODULE LAYOUT  
(MODULE FOR 71251-3001 SHOWN)

F	SEE SHEET I
E	SEE SHEET I
C	SEE SHEET I
B	SEE SHEET I
A	SEE SHEET I
2	SEE SHEET I
1	SEE SHEET I

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		TITLE .050/(1.27) PITCH MULTI-KEY DIMM ASSEMBLY FOR SDRAM 10.0mm LATCH SALES DWG	
3 PLACE ± .005	INCH	---	METRIC
2 PLACE ± .01	INCH	± 0.13	METRIC
1 PLACE ---	INCH	± 0.25	METRIC
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING NO. SDA-71251-3***	
DRWG. BY: JCL	CHK'D BY: DCB	FILE NAME: S7125132	DATE: 10/19/94
APP'D BY:	SCALE: 2:1	DIV. BY: CP	

ITEM NUMBER 71251-3***	CKT SIZE	DESCRIPTION	FUNCTION KEY	VOLTAGE KEY	DIA. 'A'	DIA. 'B'	DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'	DIM. 'E'	DIM. 'F'	DIM. 'G'	DIM. 'H'	DIM. 'I'	DIM. 'J'	DIM. 'K'	DIM. 'L'	DIM. 'P'	DIM. 'S'	DIM. 'T'	DIM. 'W'	DIM. 'X'	DIM. 'Y'	DIM. 'Z'
-3101	200	2.5 VOLT DDR	CENTERED	CENTERED	.093 (2.36)	.093 (2.36)	6.350 (161.29)	5.350 (135.89)	1.650 (41.91)	1.850 (46.99)	1.350 (34.29)	2.100 (53.34)	1.775 (45.09)	.900 (22.86)	1.200 (30.48)	6.614 (168.00)	6.946 (176.43)	6.050 (153.67)	.155 (3.94)	.020 (0.51)	.127 (3.23)	.664 (16.87)	.113 (2.87)	.250 (6.35)	.410 (10.41)

- NOTES:
- STRAIGHTNESS OF MODULE APPLIES TO THE AREA FROM THE BOTTOM OF THE CARD UP .157/(4.00).
  - IF TIE BARS ARE ATTACHED TO PADS, THE TIE BAR SHOULD BE ON AN INTERNAL LAYER, SO THAT THE REMNANT CANNOT CAUSE DAMAGE TO THE CONTACTS.
  - SEE SHEETS 1 & 2 FOR DIMENSIONS NOT SHOWN.



RECOMMENDED MODULE LAYOUT  
(MODULE FOR 71251-3101 SHOWN)

D	SEE SHEET 1
C	SEE SHEET 1
B	SEE SHEET 1
A	SEE SHEET 1
2	SEE SHEET 1
1	SEE SHEET 1

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		TITLE .050/(1.27) PITCH MULTI-KEY DIMM ASSEMBLY FOR SDRAM 10.0mm LATCH SALES DWG	
3 PLACE ± .005	---	MFG. SH. REV. LTR. REVISIONS	PART NO. SDA-71251-3***
2 PLACE ± .01	± 0.13		
1 PLACE ---	± 0.25	DRAWING INFORMATION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DATE 10/19/94	
DRWG. BY: JCL	CHK'D. BY: DCB	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	
APP'D. BY:	SCALE: 2: 1	DIV. CP	