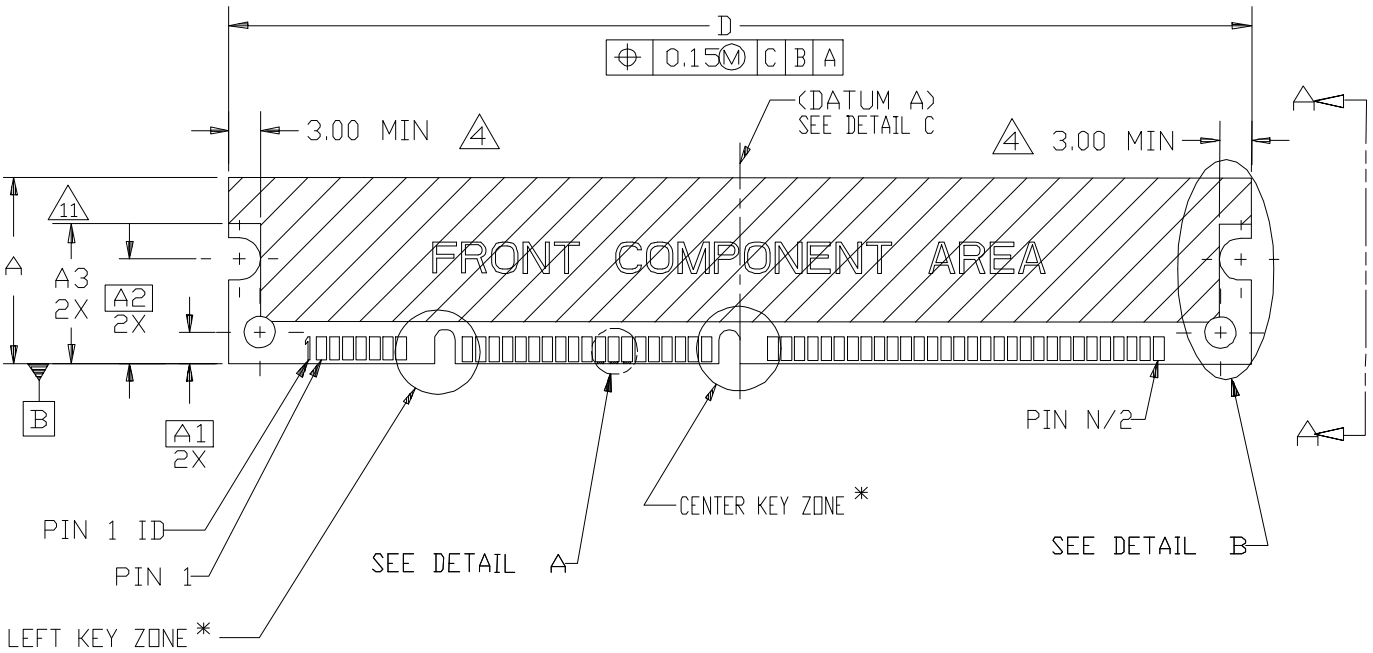
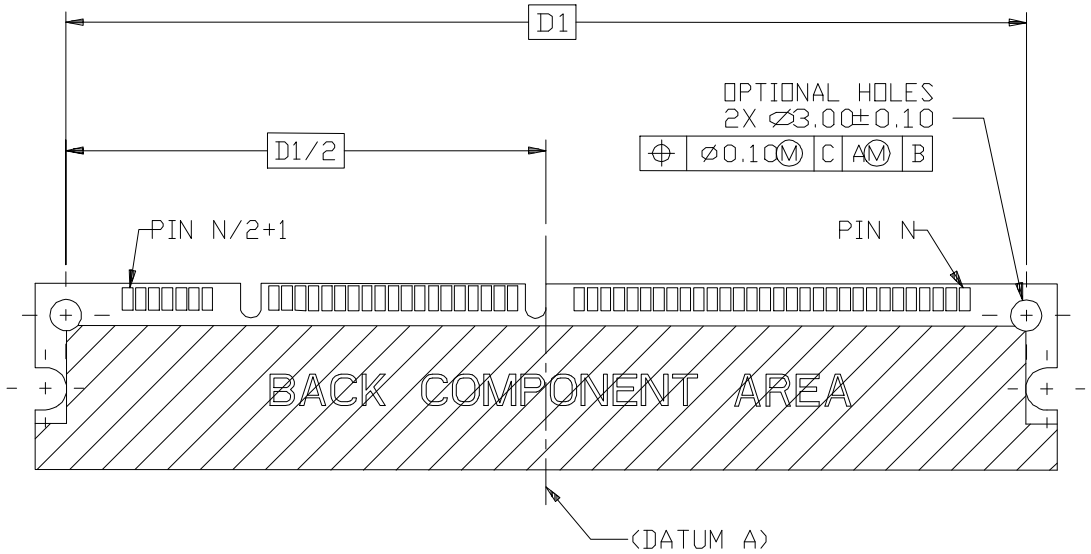
OVERALL DIMENSIONS FOR ALL CONFIGURATIONS (VRAM CONFIGURATION SHOWN FOR REFERENCE)





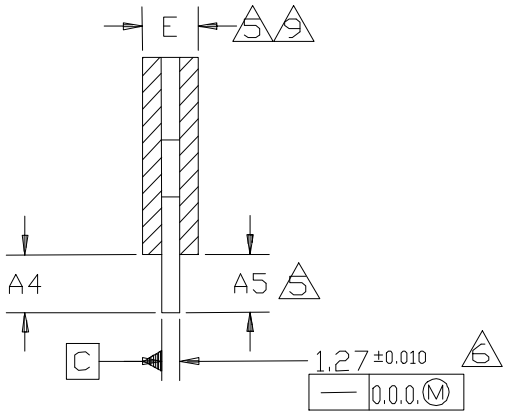
*

REFER TO PAGES 6 & 7 FOR KEY ZONE DETAIL

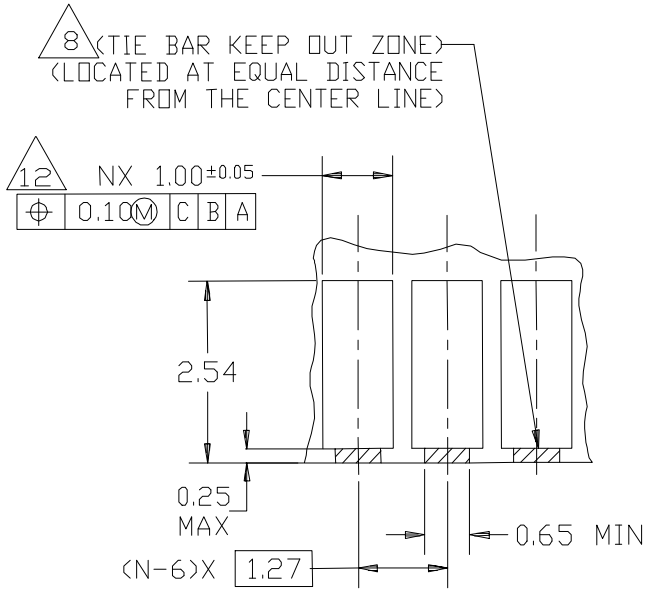
JEDEC SOLID STATE PRODUCT OUTLINE	THIS REGISTERED OUTLINE HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.

TITLE	JESD-30 DESIGNATOR	ISSUE	DATE	ITEM	SHEET
DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS		D	4/99	MO-172	1 OF 9

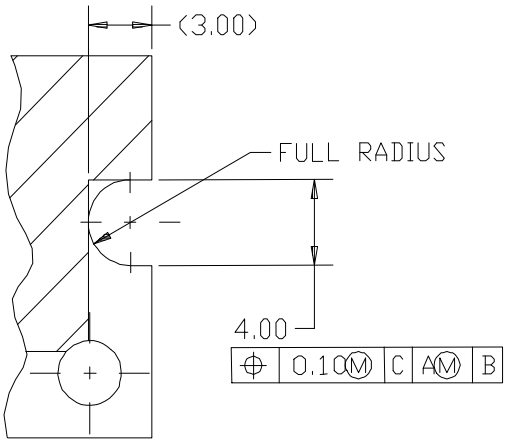
VIEW A-A



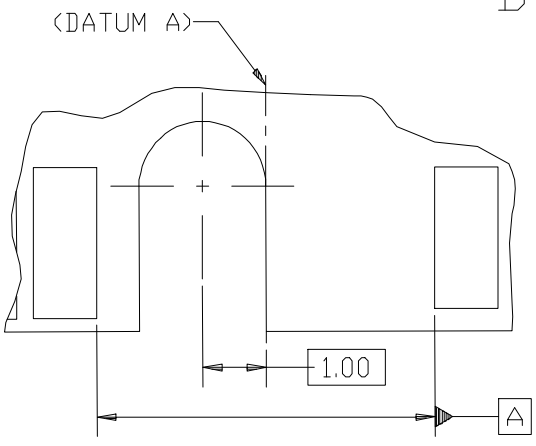
DETAIL A



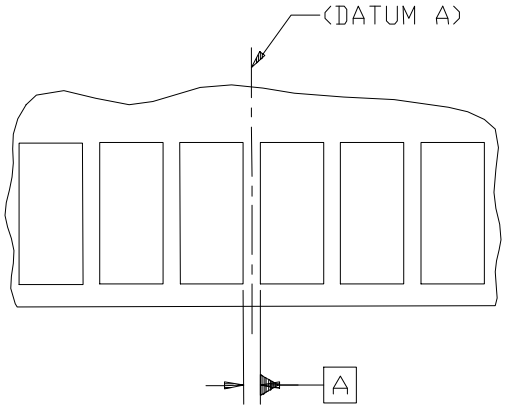
DETAIL B



DETAIL C



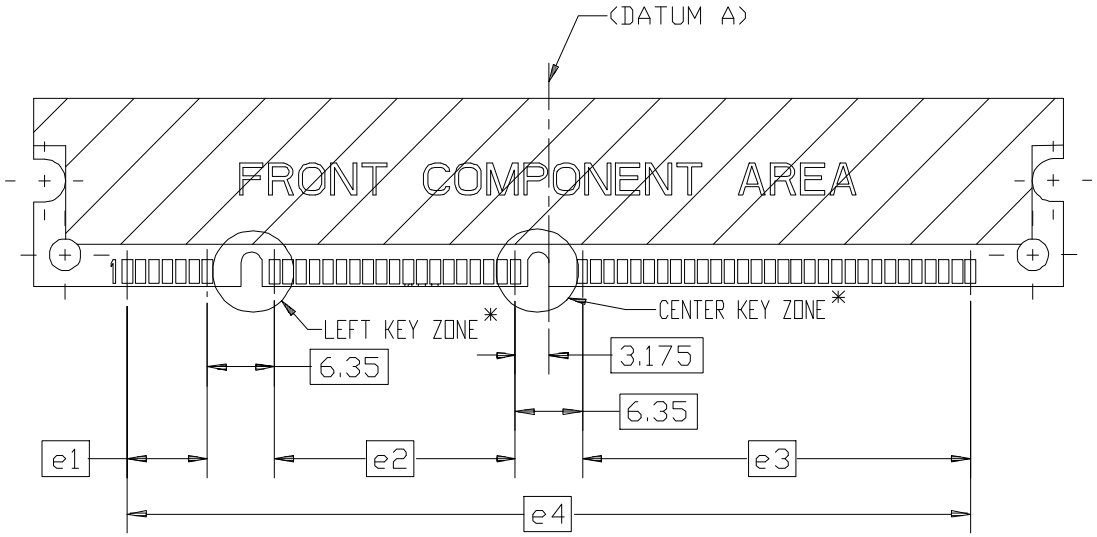
(DETAIL SHOWN WITH KEYWAY)

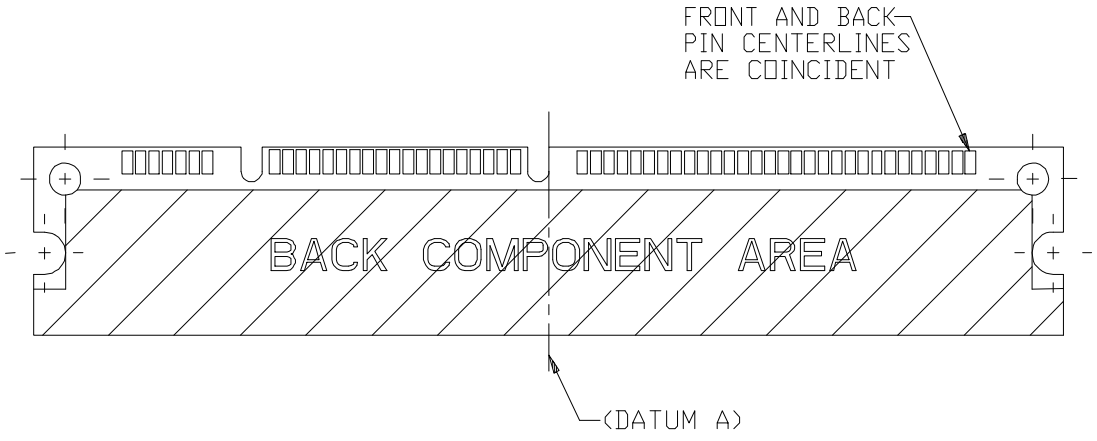


(DETAIL SHOWN WITHOUT KEYWAY)

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE D	DATE 4/99	ITEM MO-172	SHEET 2 OF 9

VRAM CONFIGURATION
(VARIATION V1)

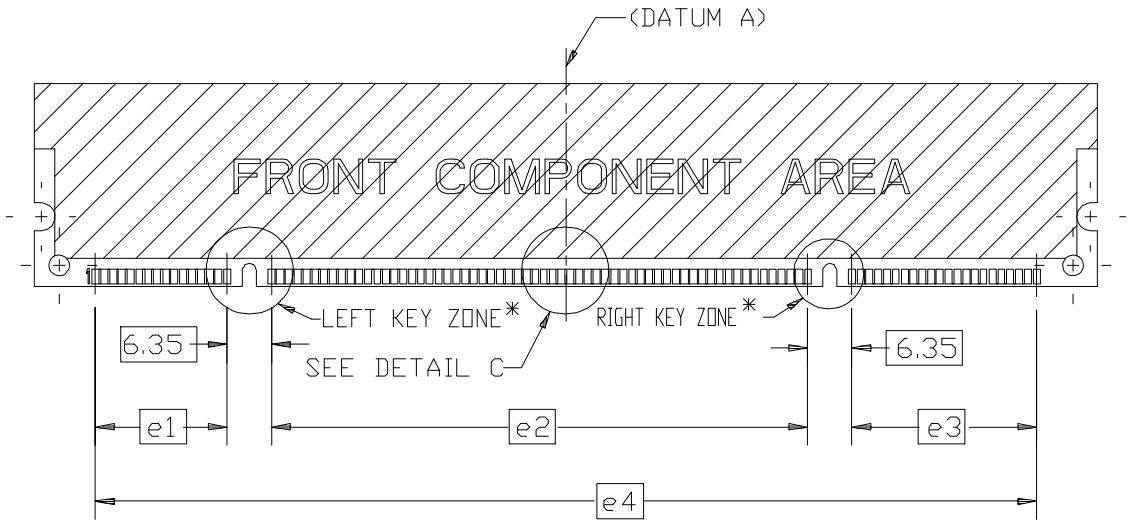


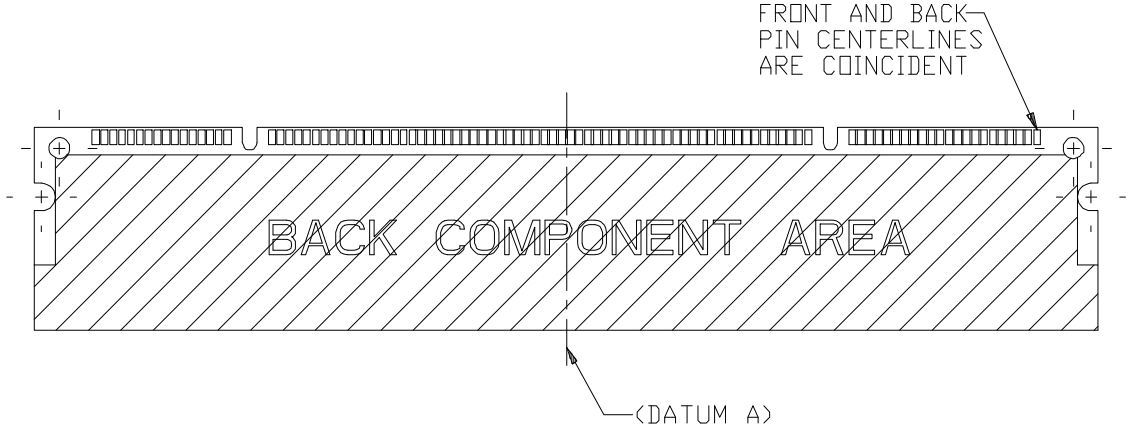


* REFER TO PAGES 6 & 7 FOR KEY ZONE DETAIL

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE D	DATE 4/99	ITEM MO-172	SHEET 3 OF 9

HIGH PERFORMANCE SDRAM CONFIGURATION (VARIATIONS S1 &S2)

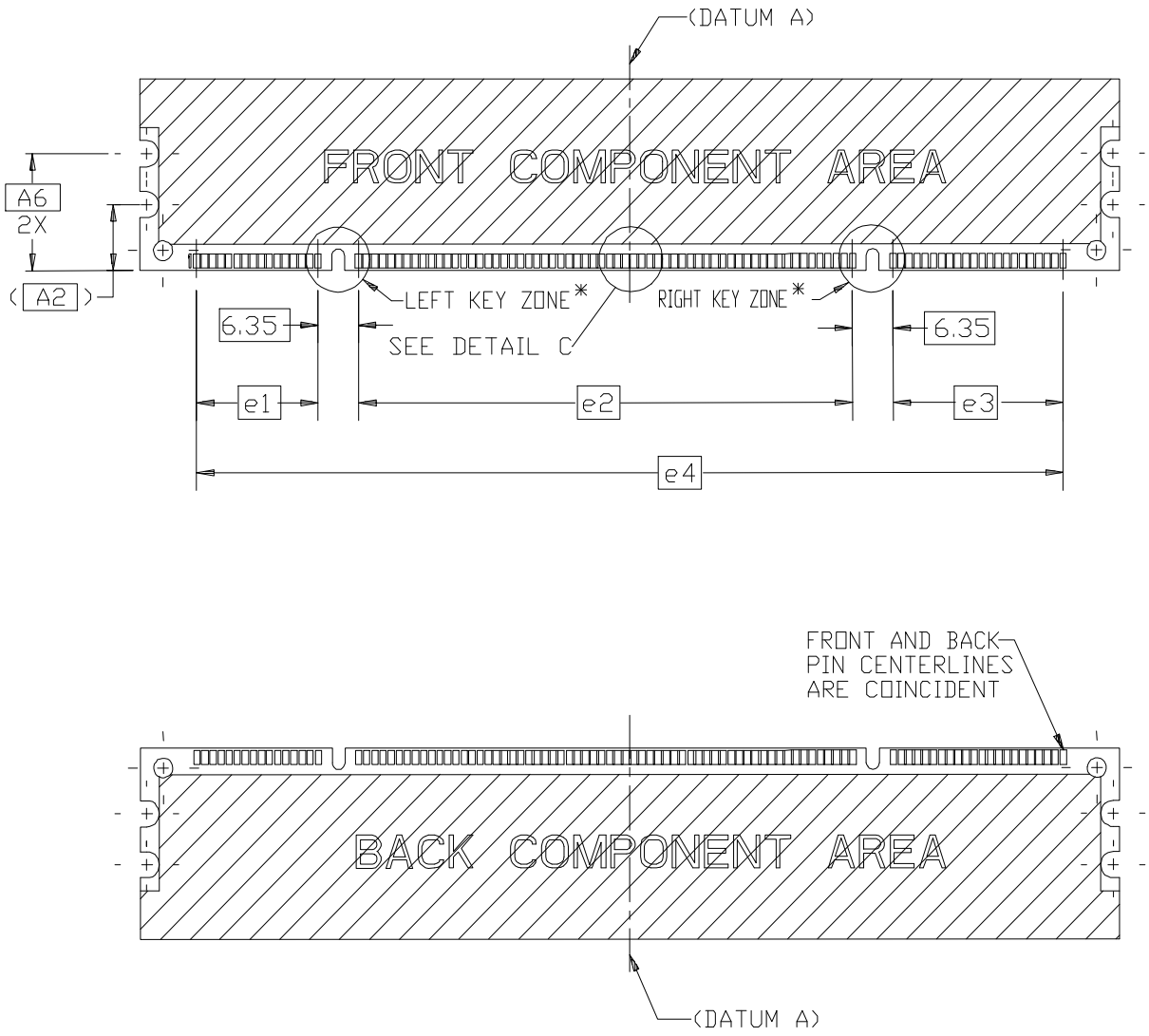




✳ REFER TO PAGES 6 & 7 FOR KEY ZONE DETAIL

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE D	DATE 4/99	ITEM MO-172	SHEET 4 OF 9

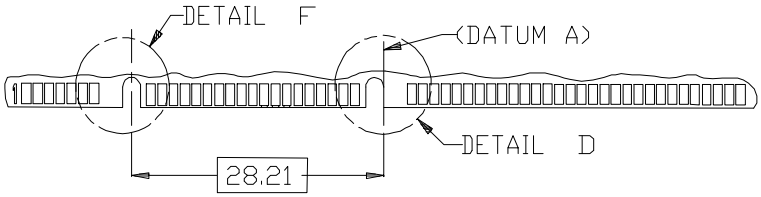
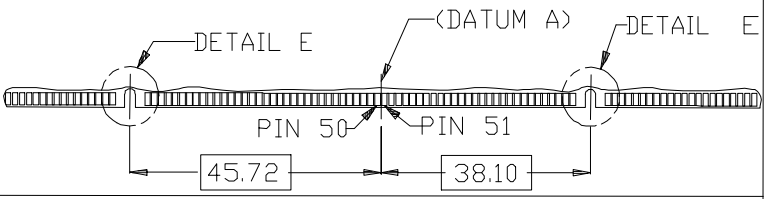
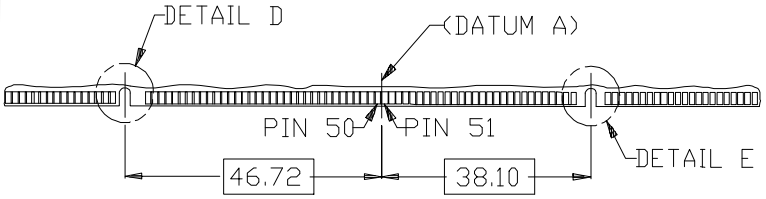
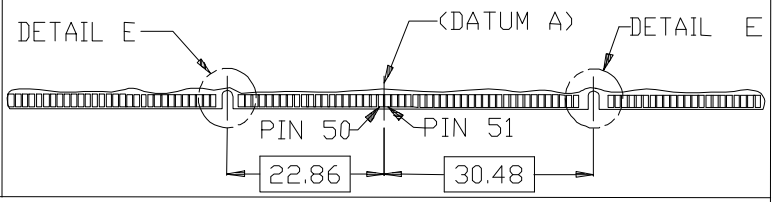
HIGH RELIABILITY
DDR SDRAM CONFIGURATION
(VARIATION H1)



* REFER TO PAGES 6 & 7 FOR KEY ZONE DETAIL

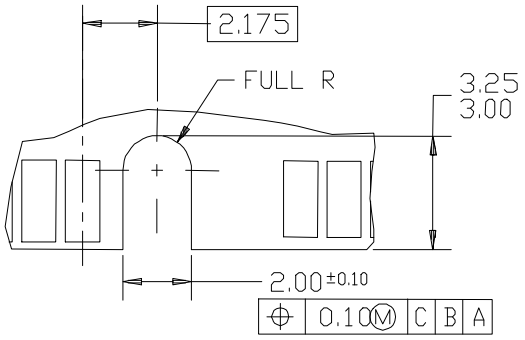
JEDEC SOLID STATE PRODUCT OUTLINE	TITLE DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE D	DATE 4/99	ITEM MO-172	SHEET 5 OF 9

KEYWAY CONFIGURATION

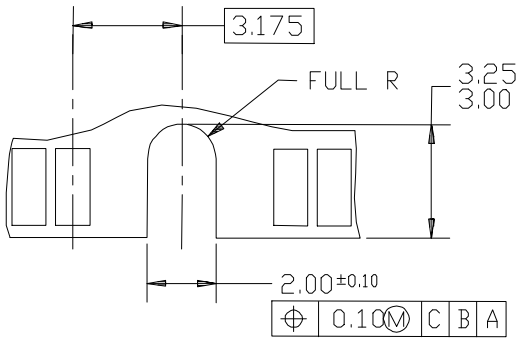
VARIATION 10	LEFT KEY ZONE	CENTER KEY ZONE	RIGHT KEY ZONE	N	MODULE KEYWAY POSITION DETAIL
XX-V1	VRAM	5.0V	NO KEY	112	
XX-S1	LVTTL	NO KEY	3.3V	200	
XX-S2	TBD	NO KEY	3.3V	200	
XX-H1	DDR	NO KEY	2.5V	200	

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE: DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE: D	DATE: 4/99	ITEM: MO-172	SHEET: 6 OF 9

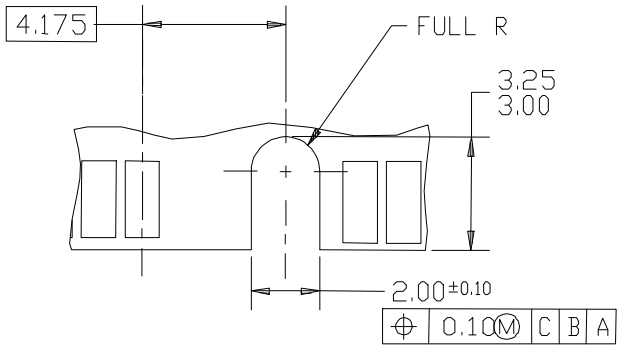
KEYWAY CONFIGURATION



DETAIL D - LEFT OFFSET KEYWAY



DETAIL E - CENTER KEYWAY



DETAIL F - RIGHT OFFSET KEYWAY

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE: DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE: D	DATE: 4/99	ITEM: MO-172	SHEET: 7 OF 9

VARIATIONS

	AA-V1			AB-V1			BA-S1			NOTES
SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
A	17.62	17.75	17.88	17.62	17.75	17.88	29.07	29.20	29.33	
A1	3.00BSC			3.00BSC			3.00BSC			
A2	10.00BSC			10.00BSC			10.00BSC			
A3	12.00	–	–	12.00	–	–	19.80			11
A4	4.00	–	–	4.00	–	–	4.00			
A5	4.00	–	–	4.00	–	–	4.00			5
D	97.67	–	97.93	97.67	–	97.93	153.57		153.83	
D1	91.80BSC			91.80BSC			146.40BSC			
E	–	–	4.00	–	–	9.00	–		4.00	5,9
e1	7.62BSC			7.62BSC			19.05BSC			
e2	22.86BSC			22.86BSC			77.47BSC			
e3	36.83BSC			36.83BSC			26.67BSC			
e4	80.01BSC			80.01BSC			135.89BSC			
aaa	–	0.30	–	–	0.30	–	–	0.50	–	6
N	112			112			200			7
NOTE	1,2,3			1,2,3			1,2,3			
REF	14-018			14-018			14-018			
ISSUE	A			A			A			

	BB-S1			CA-H1			CB-H1			NOTES
SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
A	37.97	38.10	38.23	31.62	31.75	31.88	40.51	40.64	40.77	
A1	3.00BSC			3.00BSC			3.00BSC			
A2	10.00BSC			10.00BSC			10.00BSC			
A3	19.80	–	–	19.80	–	–	19.80	–	–	11
A4	4.00	–	–	4.00	–	–	4.00	–	–	
A5	4.00	–	–	4.00	–	–	4.00	–	–	5
A6	–			17.8BSC			17.8BSC			
D	153.57	–	153.83	153.57	–	153.83	153.57	–	153.83	
D1	146.40BSC			146.40BSC			146.40BSC			
E	–	–	4.00	–	–	9.00	–	–	9.00	5,9
e1	19.05BSC			41.91BSC			41.91BSC			
e2	77.47BSC			46.99BSC			46.99BSC			
e3	26.67BSC			34.29BSC			34.29BSC			
e4	135.89BSC	–		135.89BSC			135.89BSC			
aaa	–	0.50		–	0.50	–	–	0.50	–	6
N	200			200			200			7
NOTE	1,2,3			1,2,3			1,2,3			
REF	14-018			–			–			
ISSUE	A			–			–			

NOTES:

1 ALL DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5M–1994

2 TOLERANCES ON ALL DIMENSIONS ±0.13 UNLESS OTHERWISE SPECIFIED.

3 ALL DIMENSIONS ARE IN MILLIMETERS.

4 3.00 mm MINIMUM APPLIES TO BOTH 4.00 mm WIDE NOTCH LENGTH AND COMPONENT KEEPOUT AREA.

5 DIMENSION APPLICABLE WHEN COMPONENTS MOUNTED ON BOTH SIDES.

6 CARD THICKNESS APPLIES ACROSS THE CONTACTS PADS AND INCLUDES PLATING AND/OR METALIZATION. STRAIGHTNESS CALLOUT APPLIES TO ZONE DEFINED BY THE A4, A5, AND D.

7 N IS THE TOTAL NUMBER OF CIRCUIT CONTACTS (PINS,LEADS, TABS, OR PADS).

8 LEADING EDGE OF CONTACT PADS SPECIFIED BY THE KEEP OUT ZONE SHALL BE FREE OF BURRS AND EXTERNAL TIE BARS. FOR OPTIMUM PERFORMANCE, THE TIE BAR IS TO BE ON AN INTERNAL LAYER SO THE REMNANT CANNOT CAUSE CONTACT DAMAGE.

9 WHEN SOJ DEVICES ARE USED FOR ASSEMBLY OF THIS MODULE, THE MAXIMUM THICKNESS OVERALL SHALL NOT EXCEED 9.00 mm. WHEN TSOP DEVICES ARE USED, THE MAXIMUM THICKNESS SHALL NOT EXCEED 4.00 mm.

10 XX = AA, AB, BA, BB, CA, OR CB. FOR EXAMPLE: VARIATION AA–V1 DENOTES A 4.00mm THICK, 17.75 HIGH, 5V VRAM DUAL INLINE MEMORY MODULE. THE Jc–42.5 COMMITTEE CONTROLS THE DEFINITION OF THE KEYS WHICH IS SUBJECT TO CHANGE.

11 DEFINES COMPONENT KEEP OUT ZONE AND MAY OR MAY NOT BE COINCIDENT WITH UPPER SURFACE OF NOTCH.

APPLICATION NOTES:

12 RECOMENDED PLATING FOR CONTACT PADS: GOLD PLATING 0.75 MICROMETER MINIMUM OVER NI PLATING 2 MICROMETER MINIMUM.

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE: DUAL INLINE MEMORY MODULE (DIMM) FAMILY 1.27mm CONTACT CENTERS	ISSUE: D	DATE: 4/99	ITEM: MO-172	SHEET: 9 OF 9