2X ⌒ aaa C ◀━━━ D ━━━▶ ▶ A

B

INDEX AREA
(D/2 X E/2)

⑤

E

2X ⌒ aaa C

TOP VIEW

// ccc C

A

C

NX ⌒ eee C

SIDE VIEW   A1

▲ SEATING PLANE

(DATUM A)

SEE DETAIL Y

4X k

NX L

NX b

⊕	bbb Ⓜ	C	A	B
	ddd Ⓜ	C		

4

④

3

e

5

2

6

(DATUM B)

SEE DETAIL X

1

7

INDEX AREA
(D/2 X E/2)

⑤

8=N

BOTTOM VIEW

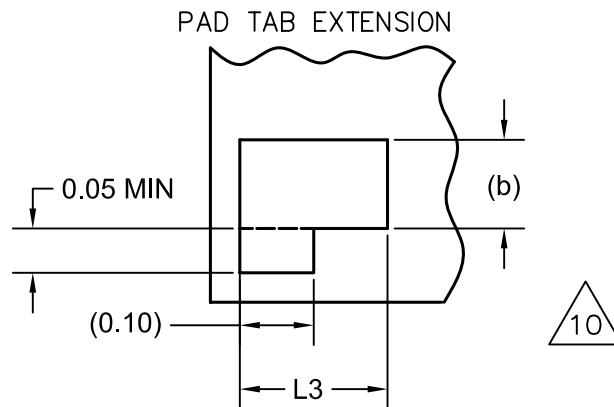| TITLE: PLASTIC VERY VERY THIN, ULTRA THIN, AND EXTREMELY THIN, FINE PITCH QUAD FLAT SMALL OUTLINE, NON-LEADED PACKAGE FAMILY | PACKAGE DESIGNATOR: (W,U,X)F-PQFN | ISSUE: B | DATE: OCTOBER 2005 | MO-255 | SHEET: 1 OF 6 |
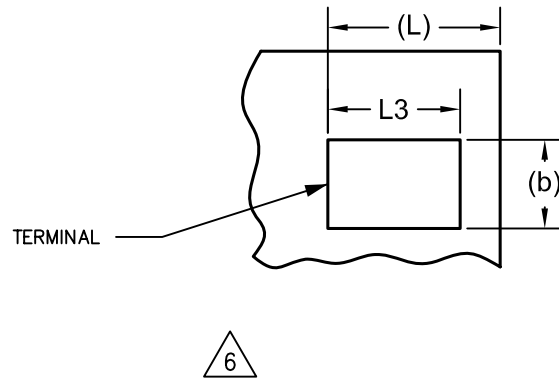
DETAIL Y
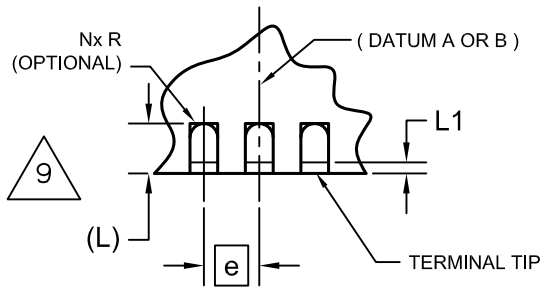
ODD TERMINAL PER SIDE
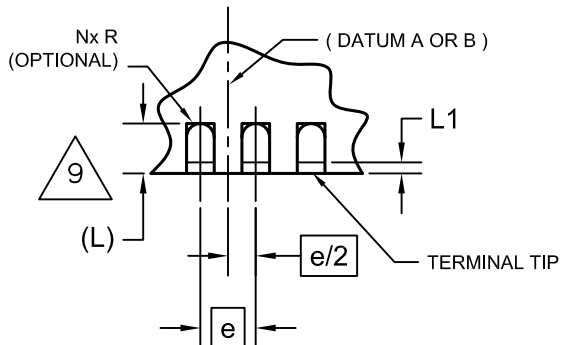
EVEN TERMINAL PER SIDE

DETAIL X

ROTATED 90°

PAD TAB EXTENSION

PIN 1 ID BOTTOM EXAMPLES

| JEDEC SOLID STATE PRODUCT OUTLINE | TITLE: PLASTIC VERY VERY THIN, ULTRA THIN, AND EXTREMELY THIN, FINE PITCH QUAD FLAT SMALL OUTLINE, NON-LEADED PACKAGE FAMILY | ISSUE: B | DATE: OCT 2005 | MO-255 | SHEET: 2 OF 6 |

FIGURE 2: TERMINAL PATTERNS BOTTOM VIEW

(DATUM A)

AAD

4

3   5

2   6

1   7

8

(DATUM B)

(DATUM A)

5

ABD

4   6

3   7

2   8

1   9

10

(DATUM B)
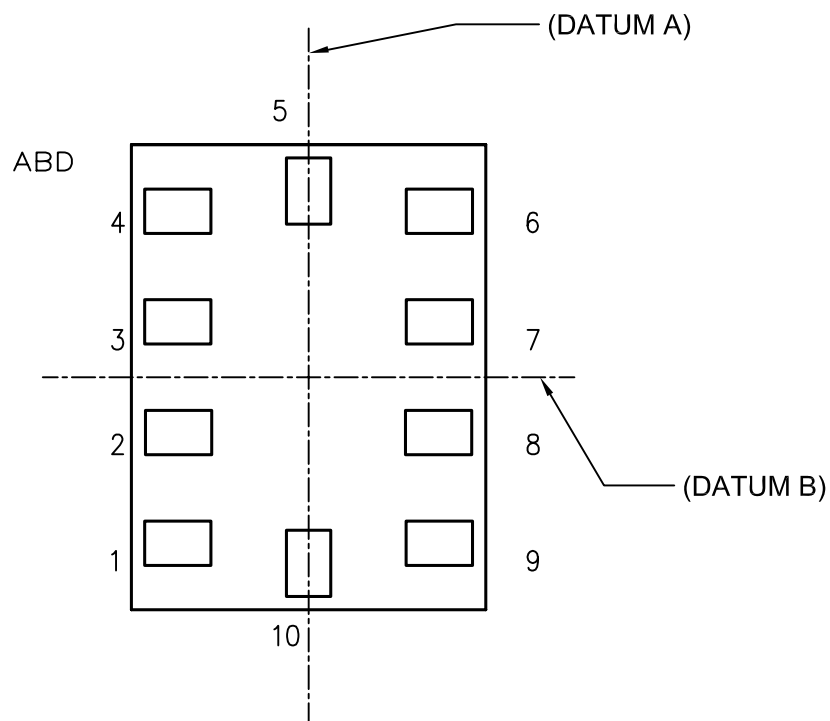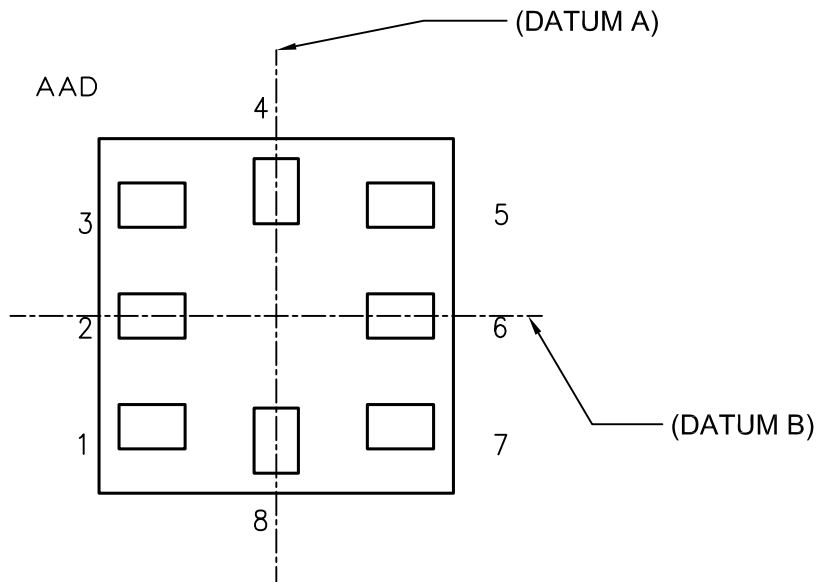
TABLE 1

	COMMON DIMENSIONS									
	W: VERY VERY THIN			U: ULTRA THIN			X: EXTREMELY THIN			
SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	NOTES
A	0.65	-	0.80	0.50	-	0.65	-	-	0.50	5
A1	0.00	-	0.05	0.00	-	0.05	0.00	-	0.05	
L1	0.00	-	0.15	0.00	-	0.15	0.00	-	0.15	9
k	0.20	-	-	0.20	-	-	0.20	-	-	
REF.	11.11-678									
NOTES	1,2									
ISSUE	-									

TABLE 2

TOLERANCES OF FORM AND POSITION		
SYMBOL		NOTE
aaa	0.10	
bbb	0.10	
ccc	0.05	
ddd	0.05	
eee	0.05	
Notes	1, 2	
Ref	11.11-678	
Issue	—	

TABLE 3

	VARIATIONS $\boxed{e}$ = 0.50							NOTE
VAR	WAAD			WABD				
	UAAD			UABD				
SYMBOL	–	–	–					
	MIN	NOM	MAX	MIN	NOM	MAX		
D BSC		1.60			1.60			6
E BSC		1.60			2.10			6
b	0.15	0.20	0.25	0.15	0.20	0.25		
L	0.25	0.30	0.42	0.25	0.30	0.42		
L3	0.25	–	–	0.25	–	–		
N		8			10			8
ND		1			1			7
NE		3			4			7
Notes				1, 2				
Ref				11.11–678				
Issue				–				

NOTES:

1   DIMENSIONING AND TOLERANCING PER ASME Y14.5M–1994.

2   ALL DIMENSIONS ARE IN MILLIMETERS.

3   OUTLINE APPLICABLE TO SUBSTRATE–BASED PACKAGE CONSTRUCTION ONLY
     (NOT APPLICAPABLE TO LEADFRAME–BASED PACKAGE CONSTRUCTION)

4   1.6 X 1.6 PACKAGE VARIATION AAD IS SHOWN FOR ILLUSTRATION ONLY.

5   A VISUAL INDEX FEATURE MUST BE LOCATED WITHIN THE HATCHED AREA.

6   DIMENSIONS b, APPLIES TO METALIZED TERMINAL AND IS MEASURED BETWEEN 0.15mm
     AND 0.25mm FROM TERMINAL TIP.

7   ND AND NE REFER TO THE NUMBER OF TERMINALS ON EACH D AND E SIDE

8   N IS THE TOTAL NUMBER OF TERMINALS.

9   DEPENDING ON THE METHOD OF TERMINATION AT THE EDGE OF THE PACKAGE,
     PULL BACK (L1) MAY BE PRESENT. L MINUS L1 TO BE EQUAL TO OR GREATER
     THAN 0.25mm

10   PROTRUSION IS OUTSIDE OF THE PIN DIMENSIONS b, L AND L3 BY
     A MINIMUM OF 0.05 MM.

11   NAMING CONVENTION FOR INDIVIDUAL VARATIONS IS PER DESIGN GUIDE 4.20

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE: PLASTIC VERY VERY THIN, ULTRA THIN, AND EXTREMELY THIN, FINE PITCH QUAD FLAT SMALL OUTLINE, NON-LEADED PACKAGE FAMILY	ISSUE: B	DATE: OCT 2005	MO-255	SHEET: 6 OF 6