TOP VIEW

⬡ aaa C
2X

5 INDEX AREA
(D/2 x E/2)

D ▶ A

B

E

⬡ aaa C
2X

SIDE VIEW

// ccc C

A

A1

⬡ eee C
Nx

C SEATING
PLANE

BOTTOM VIEW

(DATUM A)

NX b

SEE DETAIL Z

5 INDEX AREA
(D/2 x E/2)

NX L

k

(DATUM B)

e

SEE DETAIL Y

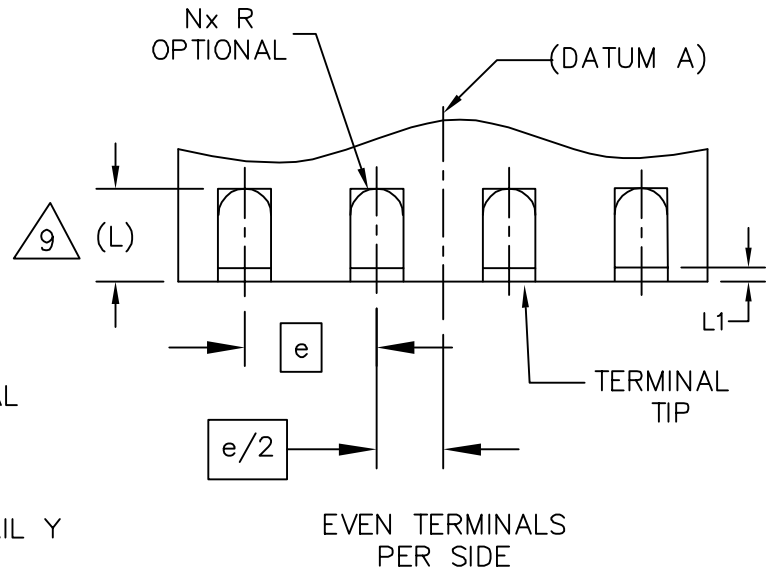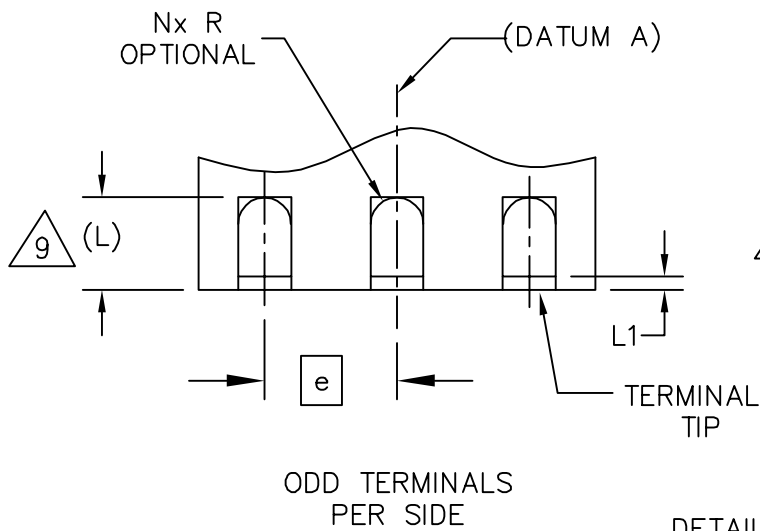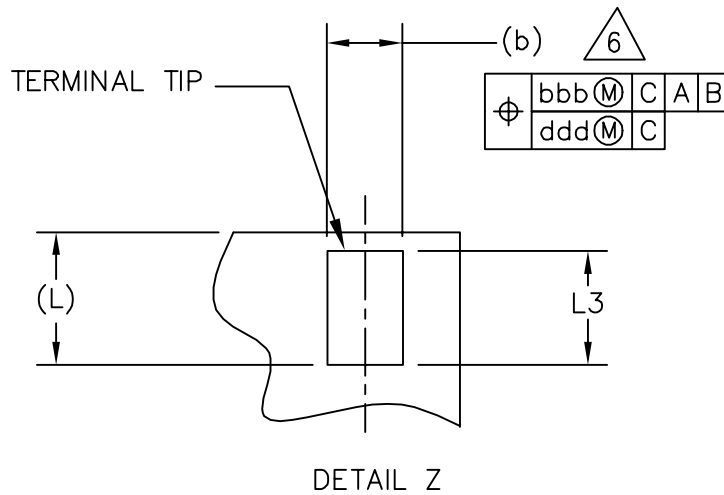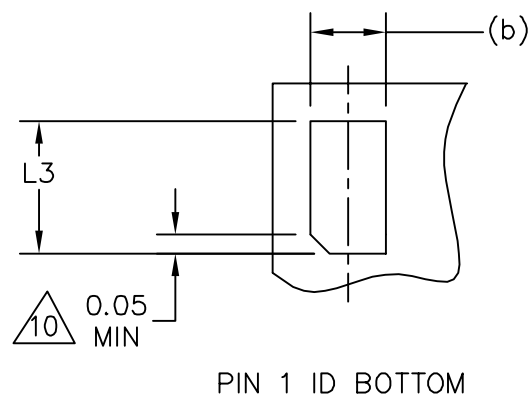| JEDEC SOLID STATE PRODUCT OUTLINE	THIS *REGISTERED OUTLINE* HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.				
TITLE PLASTIC VERY VERY THIN, ULTRA THIN AND EXTREMELY THIN, FINE PITCH DUAL SMALL OUTLINE, NON-LEADED PACKAGE FAMILY	PACKAGE DESIGNATOR (W,U,X)F-PSON	ISSUE C	DATE July 07	MO-252	SHEET 1 OF 6

TERMINAL TIP

(b) △6

⊕ | bbb Ⓜ C A B |
| ddd Ⓜ C |

(L)

L3

DETAIL Z

Nx R
OPTIONAL

(DATUM A)

△9 (L)

L1

e

ODD TERMINALS
PER SIDE

DETAIL Y

Nx R
OPTIONAL

(DATUM A)

△9 (L)

L1

e

e/2

TERMINAL
TIP

EVEN TERMINALS
PER SIDE

ELONGATION AND CHAMFER

(b)

L3

△10 0.05
MIN

PIN 1 ID BOTTOM

| JEDEC SOLID STATE PRODUCT OUTLINE | TITLE PLASTIC VERY VERY THIN, ULTRA THIN AND EXTREMELY THIN, FINE PITCH DUAL SMALL OUTLINE, NON−LEADED PACKAGE FAMILY | ISSUE C | DATE July 07 | MO−252 | SHEET 2 OF 6 |

FIGURE 2
TERMINAL PATTERN
BOTTOM VIEWS

PATTERN A /4\

PATTERN B /4\

PATTERN C /4\

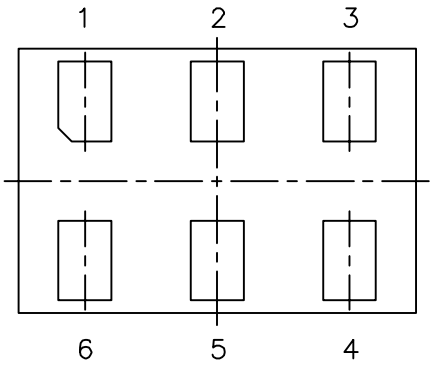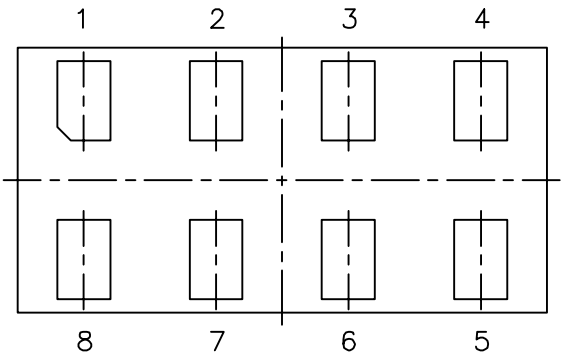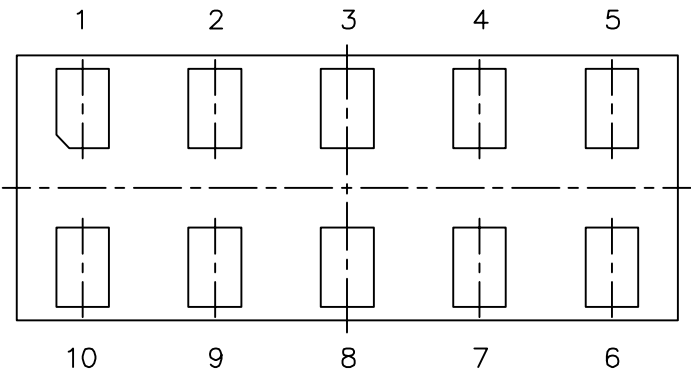| JEDEC SOLID STATE PRODUCT OUTLINE | TITLE PLASTIC VERY VERY THIN, ULTRA THIN AND EXTREMELY THIN, FINE PITCH DUAL SMALL OUTLINE, NON−LEADED PACKAGE FAMILY | ISSUE C | DATE July 07 | MO−252 | SHEET 3 OF 6 |

TABLE 1

	COMMON DIMENSIONS									
	W = VERY VERY THIN			U = ULTRA THIN			X = EXTREMELY THIN			NOTES
SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
A	>0.65	–––	0.80	>0.50	–––	0.65	–––	–––	0.50	
A1	0.00	–––	0.05	0.00	–––	0.05	0.00	–––	0.05	
b	0.15	0.20	0.25	0.15	0.20	0.25	0.15	0.20	0.25	6
L	0.25	0.30	0.45	0.25	0.30	0.45	0.25	0.30	0.45	
L1	0.00	–––	0.10	0.00	–––	0.10	0.00	–––	0.10	9
L3	0.25	–––	–––	0.25	–––	–––	0.25	–––	–––	
k	0.20	–––	–––	0.20	–––	–––	0.20	–––	–––	
NOTES	1, 2									
REF	11–693, 11–770									
ISSUE	C									

TABLE 2

TOLERANCES OF FORM AND POSITION	
SYMBOL	VALUE
aaa	0.10
bbb	0.10
ccc	0.05
ddd	0.05
eee	0.05
NOTES	1,2
REF	11–693
ISSUE	B

TABLE 3

VARIATIONS e = 0.50

VAR / SYMBOL	WAAD	–––	–––	–––	NOTE
	UAAD	UBBD	–––	–––	
	–––	–––	XBAD	XCAD	
D BSC	1.50	2.00	2.00	2.50	
E BSC	1.00	2.00	1.00	1.00	
N	6	8	8	10	8
ND	3	4	4	5	7
NE	0	0	0	0	7
Notes	1, 2				
Ref	11–693, 11–770				
Issue	C				

NOTES:

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

2. DIMENSIONS ARE IN MILLIMETERS.

3. OUTLINE APPLICABLE TO SUBSTRATE−BASED PACKAGE CONSTRUCTION ONLY, (NOT APPLICABLE TO LEADFRAME BASED PACKAGE CONSTRUCTION)

4. TERMINAL PATTERNS A, B AND C ARE SHOWN FOR ILLUSTRATION ONLY.

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

6. DIMENSION 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. FOR THIS OUTLINE, NE SHALL ALWAYS BE "0" ZERO.

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. OPTIONAL PIN 1 ID PROTRUSION IS OUTSIDE OF THE PIN DIMENSIONS b, L AND L3 BY A MINIMUM OF 0.05 MM.

11. THIS OUTLINE CONFORMS TO JEP95, SECTION 4.20, AND SECTION 3, SPP−017.

Change Record

If the change involves any words added or deleted (excluding deletion of accidentally repeated words), the change is to be included below. Punctuation changes may or may not be included.

Initial Issue: A	Date: JUNE 2004	Item: 11-677

Revision History:

Issue: B	Date: OCT. 2004	Item: 11-693

Issue: C	Date: July 07		Item: 11-770

Location	Change from:	Change to:
Sht 4, table 1		Added symbols b, L & L3
Sht 4, table 1	SYMBOL A MIN 0.65 & 0.50	>0.65 & >0.50
Sht 4, table 3		Deleted symbols b, L & L3
Sht 4, table 3		Added variation UBBD

Issue:	Date:	Item:

Location	Change from:	Change to:

Issue:	Date:	Item:

Location	Change from:	Change to:

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE PLASTIC VERY VERY THIN, ULTRA THIN AND EXTREMELY THIN, FINE PITCH DUAL SMALL OUTLINE, NON-LEADED PACKAGE FAMILY	ISSUE C	DATE July 07	MO-252	SHEET 6 OF 6