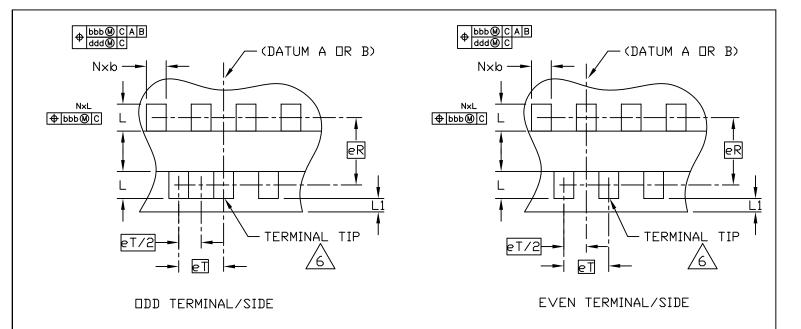


2-ROW STAGGERED TERMINAL NUMBERING BOTTOM VIEW  $\underline{\text{DETAIL } C}$ 

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# 2-ROW STAGGERED TYPE SAW-ISOLATED TERMINAL POSITION <u>DETAIL D</u>

TABLE 1

	\ \ \	/ A D T A T		E C I C N				
VARIATION DESIGNATORS								
FIRST LET	TER CODE	SECOND LE	ETTER CODE	THIRD LE	TTER CODE	FOURTH LE	ETTER CODE	
<b>OVERALL</b>	HEIGHT	BODY L	ENGTH	$B\Box DY$	WIDTH	TERMINA	L PITCH	
Α	LETTER CODE	D	LETTER CODE	E	LETTER CODE	eТ	LETTER CODE	
1.00 MAX.	V	1.0	Α	1.0	Α	0.65	Α	
0.80 MAX.	W	1.5	В	1.5	В	0.50	В	
0.65 MAX.	U	2.0	С	2.0	C	0.40	С	
_	_	2.5	D	2.5	D	1	-	
_	_	3.0	E	3.0	E	ı	_	
_	_	3.5	F	3.5	F		_	
_	_	4.0	G	4.0	G	-	_	
_	_	4.5	Ι	4.5	Τ	_	_	
_	_	5.0	J	5.0	J		_	
_	_	6.0	K	6.0	K		_	
_	_	7.0	L	7.0	L	-	_	
_	_	8.0	М	8.0	М	-	_	
_	_	9.0	N	9.0	N		_	
_	_	10.0	Р	10.0	Ρ		_	
_	_	11.0	Q	11.0	Q	-	_	
_	_	12.0	R	12.0	R	_	_	
_	_	13.0	S	13.0	S	-	_	
_	_	14.0	Т	14.0	T	-	_	
_	_	15.0	U	15.0	U	_	_	
_	_	16.0	٧	16.0	٧	_	_	
_	_	17.0	W	17.0	W	-	_	
_	_	18.0	Y	18.0	Υ		_	
_	_	19.0	Z	19.0	Z	_	_	

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# TABLE 2

TERMINAL PITCH eT										
SYMBOL		0.65 BS	С		0.50 BS	С		0.40 BS	С	
STMBOL	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
b	0.35	_	0.45	0.20	_	0.30	0.15	_	0.25	
L	0.35 - 0.45		0.25	_	0.35	0.20	_	0.30		
LC	0.35	_	0.45	0.25	_	0.35	0.20	-	0.30	
eR	(	0.85 BSC		0.75 BSC			0.70 BSC			
NOTES	1,2,7			1,2,7			1,2,7			
REF	11-692			11-692		11-692		2		
ISSUE	A			A				A		

#### TABLE 3

COMMON DIMENSIONS									
SYMBOL	V:	VERY .	THIN	W: VE	ERY VER	Y THIN	U:	ULTRA	THIN
	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX
Α	0.80	0.85	0.90	0.70	0.75	0.80	0.55	0.60	0.65
			C	THER CC	MMON DI	MENSIONS	3		
		MIN			NOM			MAX	
A1		0.00						0.05	
k		0.20							
L1	0.05 0.15								
H1		0.25						0.45	
H2		0.15						0.25	
	,		TOL	ERANCE (	OF FORM	& POSIT	ION		
aaa					0.15				
bbb					0.10				
ccc					0.10				
ddd					0.05				
eee					0.08				
fff					0.10				
NOTES					1,2,7				
REF					11-707				
ISSUE					В				

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### TABLE 4

SUMMARY TABLE FOR TWO ROW STAGGERED								
BODY SIZE	LEAD PITCH	LEAD COUNT	VERY THIN PROFILE	VERY VERY THIN PROFILE	ULTRA THIN PROFILE			
5.00 X 5.00	0.50	44	VJJB	WJJB	UJJB			
6.00 X 6.00	0.50	60	VKKB	WKKB	UKKB			
7.00 X 7.00	0.50	76	VLLB	WLLB	ULLB			
8.00 X 8.00	0.50	92	VMMB	WMMB	UMMB			
9.00 X 9.00	0.50	108	VNNB	WNNB	UNNB			
10.00 X 10.00	0.50	124	VPPB	WPPB	UPPB			
12.00 X 12.00	0.50	156	VRRB	WRRB	URRB			



## TABLE 5

	$\overline{\text{eT}} = 0.50 \text{mm} \text{ PITCH}$								
VAF	RIATION	VJJB	VKKB	VLLB	VMMB	VNNB	VPPB	VRRB	
	_	WJJB	WKKB	WLLB	WMMB	WNNB	WPPB	WRRB	NOTE
SYMBOL		UJJB	UKKB	ULLB	UMMB	UNNB	UPPB	URRB	
D BS	C.	5.00	6.00	7.00	8.00	9.00	10.00	12.00	5
E BS	C.	5.00	6.00	7.00	8.00	9.00	10.00	12.00	5
	MIN	1.65	2.65	3.65	4.65	5.65	6.65	8.65	
D2	NOM	1.80	2.80	3.80	4.80	5.80	6.80	8.80	
	MAX	1.95	2.95	3.95	4.95	5.95	6.95	8.95	
	MIN	1.65	2.65	3.65	4.65	5.65	6.65	8.65	
E2	NOM	1.80	2.80	3.80	4.80	5.80	6.80	8.80	
	MAX	1.95	2.95	3.95	4.95	5.95	6.95	8.95	
N		44	60	76	92	108	124	156	4
NDA		7	9	11	13	15	17	21	
NDE	}	4	6	8	10	12	14	18	
NEA		7	9	11	13	15	17	21	
NEB	}	4	6	8	10	12	14	18	
NOTE	S	7	7	7	7	7	7	7	
REF		11-707	11-707	11-707	11-707	11-707	11-707	11-707	
ISSU	E	В	В	В	В	В	В	В	

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#### NOTES:

- 1. Dimensioning and tolerancing schemes conform to ASME Y14.5M-1994.
- 2. All dimensions are in millimeters.
- Terminal #A1 identifier must be located within the zone indicated on the outline drawing. Topside terminal #A1 indicator may be a molded, marked, or metallized feature. Optional indicator on bottom surface may be a molded, marked or metallized feature.
  - 4. "N" is the maximum number of terminal positions for the specified body size. Depopulation is allowed, but only under the following conditions.
    - a— Depopulation scheme must be consistent in each quadrant of the package.
    - b— Non—symmetric variations should be broken out as separate mechanical outline variations, including depopulation graphics.
  - 5. Outlines with "D" and "E" increments less than 0.50 mm should be registered as "stand alone" outlines. These outlines should use as many of the algorithms and dimensions stated in the design standard as possible to insure predictability in manufacturing.
- 6 Inner edge of corner terminals may be chamfered or rounded in order to achieve minimum gap "k". This feature should not affect the terminal width "b", which is measured L/2 from the edge of the package body.
- 7. For a complete set of dimensions for each variation, see the individual variation tables and the common dimensions and tolerance on pages 4 & 5.
- A company has issued patents and has related patent applications that may apply to this registration. If the current issued patents or later patents resulting from related applications do apply, this company intends to comply with the JEDEC patent policy and license under reasonable terms and conditions that are demonstrably free of any unfair discrimination. Reference patents are as follows:

ASAT : US PATENT # 6,229,200; 6,242,281; 6,635,957; & 6,498,099

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PRODUCT	DUTLINE

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