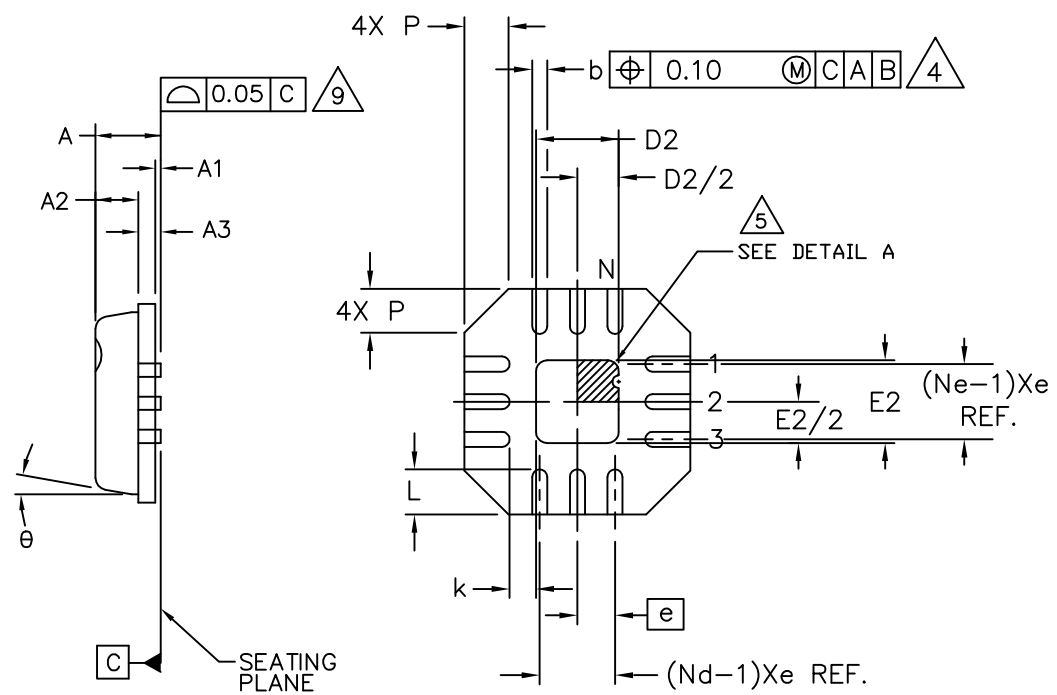
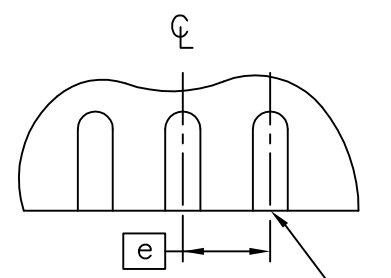


TOP VIEW

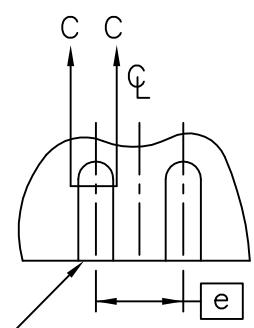


BOTTOM VIEW

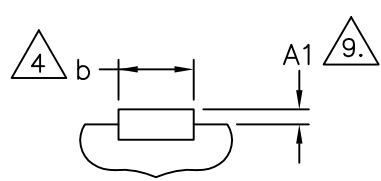


FOR ODD TERMINAL/SIDE

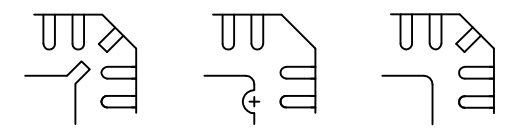
TERMINAL TIP



FOR EVEN TERMINAL/SIDE



SECTION "C-C"



STANDARD

DETAIL A

PIN #1 ID AND TIE BAR MARK OPTIONS



PROPRIETARY INFORMATION	
TITLE: PACKAGE OUTLINE, 12,16L QFN, 3x3x0.90 MM	
APPROVAL	DOCUMENT CONTROL NO. 21-0102
REV. G	1/2

COMMON DIMENSIONS						
PKG	12L 3x3			16L 3x3		
SYMBOL	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.80	0.90	1.00	0.80	0.90	1.00
A1	0.00	0.01	0.05	0.00	0.01	0.05
A2	0.00	0.65	1.00	0.00	0.65	1.00
A3	0.20 REF			0.20 REF		
b	0.18	0.23	0.30	0.18	0.23	0.30
D	2.90	3.00	3.10	2.90	3.00	3.10
D1	2.75 BSC			2.75 BSC		
E	2.90	3.00	3.10	2.90	3.00	3.10
E1	2.75 BSC			2.75 BSC		
e	0.50 BSC			0.50 BSC		
k	0.25	—	—	0.25	—	—
L	0.35	0.55	0.75	0.30	0.40	0.50
N	12			16		
ND	3			4		
NE	3			4		
P	0.00	0.42	0.60	0.00	0.42	0.60
θ	0°		12°	0°		12°

EXPOSED PAD VARIATIONS						
PKG. CODES	D2			E2		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
G1233-1	0.95	1.10	1.25	0.95	1.10	1.25
G1633-2	0.95	1.10	1.25	0.95	1.10	1.25

NOTES:

1. DIE THICKNESS ALLOWABLE IS 0.305mm MAXIMUM (.012 INCHES MAXIMUM).
2. DIMENSIONING & TOLERANCES CONFORM TO ASME Y14.5M. – 1994.
3. N IS THE NUMBER OF TERMINALS.
Nd IS THE NUMBER OF TERMINALS IN X-DIRECTION &
Ne IS THE NUMBER OF TERMINALS IN Y-DIRECTION.
4. DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.20 AND 0.25mm FROM TERMINAL TIP.
5. THE PIN #1 IDENTIFIER MUST EXIST ON THE TOP SURFACE OF THE PACKAGE BY USING INDENTATION MARK OR INK/LASER MARKED. DETAILS OF PIN #1 IDENTIFIER IS OPTIONAL, BUT MUST BE LOCATED WITHIN ZONE INDICATED.
6. EXACT SHAPE AND SIZE OF THIS FEATURE IS OPTIONAL.
7. ALL DIMENSIONS ARE IN MILLIMETERS.
8. PACKAGE WARPAGE MAX 0.05mm.
9. APPLIED FOR EXPOSED PAD AND TERMINALS. EXCLUDE EMBEDDING PART OF EXPOSED PAD FROM MEASURING.
10. MEETS JEDEC MO220.
11. THIS PACKAGE OUTLINE APPLIES TO ANVIL SINGULATION (STEPPED SIDES).

 	
PROPRIETARY INFORMATION	
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