

**NOTES:**

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5-1982.
2. DATUM PLANE [ ] LOCATED AT MOLD PARTING LINE AND COINCIDENT WITH LEAD, WHERE LEAD EXITS PLASTIC BODY AT PARTING LINE.
3. DATUMS [ ] AND [ ] TO BE DETERMINED WHERE CENTERLINE BETWEEN LEADS EXITS PLASTIC BODY AT DATUM PLANE [ ] .
4. TO BE DETERMINED AT SEATING PLANE [ ] .
5. DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE MOLD PROTRUSION IS 0.254 MM PER SIDE. DIMENSIONS D1 AND E1 DO INCLUDE MOLD MISMATCH AND ARE DETERMINED AT DATUM PLANE [ ] .
6. "N" IS THE TOTAL NUMBER OF TERMINALS.
7. PACKAGE TOP DIMENSIONS ARE SMALLER THAN BOTTOM DIMENSIONS BY 0.20 MM, AND TOP OF PACKAGE WILL NOT OVERHANG BOTTOM OF PACKAGE.
8. DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08 MM TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL CONDITION. DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OR THE FOOT.
9. ALL DIMENSIONS ARE IN MILLIMETERS.
10. MAXIMUM ALLOWABLE DIE THICKNESS TO BE ASSEMBLED IN THIS PKG. FAMILY IS 0.635 MM.
11. THIS DRAWING CONFORMS TO JEDEC REGISTERED OUTLINE MS-029.
12. THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 MM AND 0.25 MM FROM THE LEAD TIP.

LD CNT.	ANAW/AMKOR	JEDEC MS-029
120	BA	✓
128	BB	✓
136	BC	✓
144	BD	✓
160	BE	✓
208	BF	FA-1
256	BG	FB-1

**VARIATIONS**

ALL DIMENSIONS IN MILLIMETERS

S M D L	BA		BB		BC		BD		BE		BF, FA-1		BG, FB-1		N D T E
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
A	3.70	4.07	3.70	4.07	3.70	4.07	3.70	4.07	3.70	4.07	3.70	4.07	3.70	4.07	4
A1	0.25	0.33	0.25	0.33	0.25	0.33	0.25	0.33	0.25	0.33	0.25	0.33	0.25	0.33	4
A2	3.50	3.60	3.20	3.60	3.20	3.60	3.20	3.60	3.20	3.60	3.20	3.60	3.20	3.60	4
D	30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		4
D1	29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		5
D3	23.20 REF.		24.80 REF.		21.45 REF.		22.75 REF.		25.95 REF.		25.50 REF.		29.20 REF.		5
D3	2.40 REF.		1.60 REF.		3.275 REF.		2.425 REF.		1.25 REF.		1.25 REF.		1.40 REF.		4
E	30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		30.60 BSC.		4
E1	29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		29.00 BSC.		5
E3	23.20 REF.		24.80 REF.		21.45 REF.		22.75 REF.		25.95 REF.		25.50 REF.		29.20 REF.		5
Zc	2.40 REF.		1.60 REF.		3.275 REF.		2.425 REF.		1.25 REF.		1.25 REF.		1.40 REF.		4
L	0.50	0.60	0.50	0.60	0.50	0.60	0.50	0.60	0.50	0.60	0.50	0.60	0.50	0.60	6
N	128		128		136		144		160		208		256		6
b	0.80 BSC.		0.80 BSC.		0.65 BSC.		0.65 BSC.		0.65 BSC.		0.50 BSC.		0.40 BSC.		6
b	0.30	0.45	0.30	0.45	0.22	0.38	0.22	0.38	0.22	0.38	0.17	0.27	0.13	0.18	6
b1	0.30	0.35	0.40	0.40	0.22	0.30	0.22	0.30	0.22	0.30	0.17	0.20	0.13	0.16	6
b1	0.30	0.35	0.40	0.40	0.22	0.30	0.22	0.30	0.22	0.30	0.17	0.23	0.13	0.19	6
d4d4	0.16		0.16		0.12		0.12		0.12		0.08		0.07		6