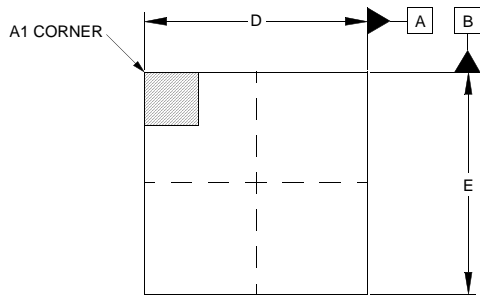
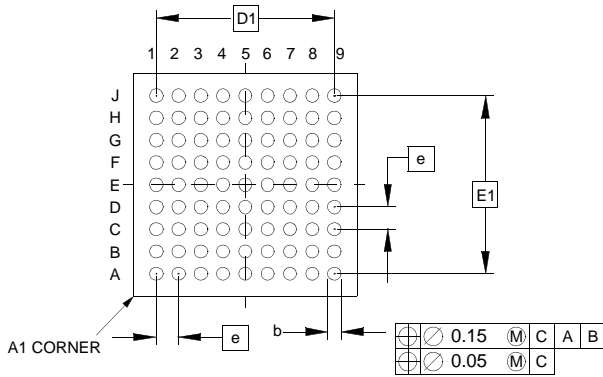


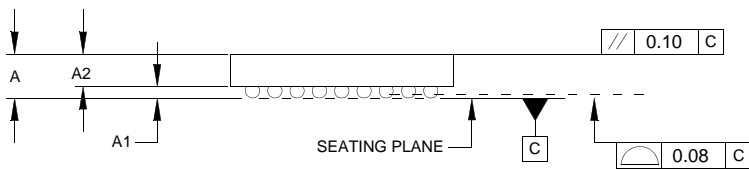
Thin, Fine Pitch, Plastic Ball Grid Array Package (TFBGA)



TOP VIEW



BOTTOM VIEW



SIDE VIEW

V81.5x5

81 BALL THIN, FINE PITCH, PLASTIC BALL GRID ARRAY PACKAGE (TFBGA)

SYMBOL	MIN	NOMINAL	MAX	NOTES
A	0.75	0.91	1.07	-
A1	0.15	0.21	0.27	-
A2	0.60	0.70	0.80	-
b	0.25	0.30	0.35	-
D/E	4.90	5.00	5.10	-
D1/E1	4.0 BSC			-
N	81			3
e	0.5 BSC			-
MD/ME	9x9			6

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NOTES:

1. Dimensions are in millimeters.
2. Dimensioning and tolerancing conform to ASME Y 14.5M-1994.
3. "N" is the total number of balls.
4. Primary datum C and seating plane are defined by the spherical crowns of the contact balls.
5. Pin "A1" is marked on the top and bottom sides adjacent to A1.
6. "MD" and "ME" are the number of balls in the matrix in the D and E directions respectively.