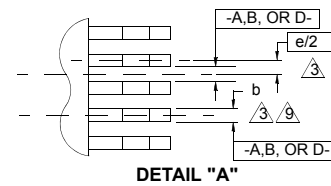
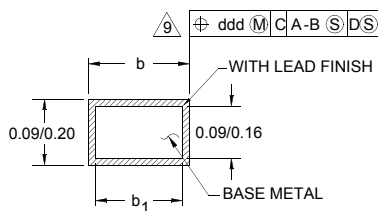
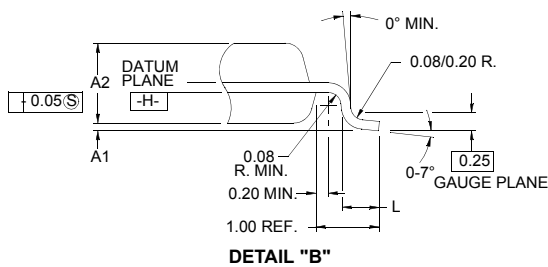
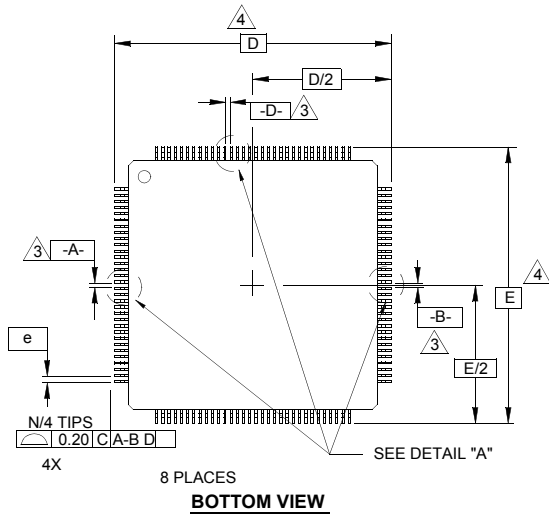
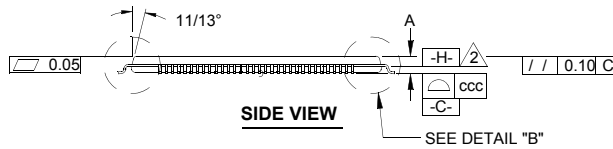
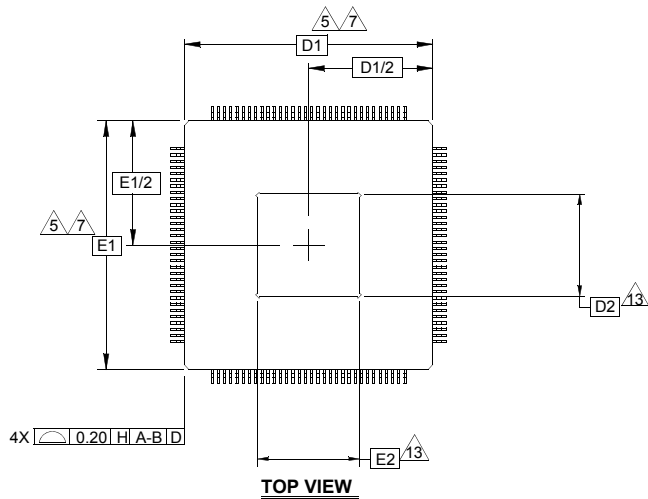


Plastic Packages for Integrated Circuits

Thin Plastic Quad Flatpack Package with Top Exposed Pad (TQFP-TEP)



Q64.10x10E

64 LEAD THIN PLASTIC QUAD FLATPACK PACKAGE WITH TOP EXPOSED PAD (TQFP-TEP)

SYMBOL	ACD			NOTES
	MIN	NOM.	MAX	
A	$\cancel{\text{---}}$	$\cancel{\text{---}}$	1.20	
A1	0.05	$\cancel{\text{---}}$	0.15	12
A2	0.95	1.00	1.05	
D	12.00 BSC			4
D1	10.00 BSC			7, 8
D2	7.49 BSC			13
E	12.00 BSC			4
E1	10.00 BSC			7, 8
E2	7.49 BSC			13
L	0.45	0.60	0.75	
N	64			
e	0.50 BSC			
b	0.17	0.22	0.27	9
b1	0.17	0.20	0.23	
ccc	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.08	
ddd	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.08	

Rev. 1 7/11

NOTES:

- All dimensions and tolerances per ANSI Y14.5-1982.
- Datum plane -H- located at mold parting line and coincident with lead, where lead exits plastic body at bottom of parting line.
- Datums A-B and -D- to be determined at center line between leads where leads exit plastic body at datum plane -H- .
- To be determined at seating plane -C- .
- Dimensions D1 and E1 do not include mold protrusion. Allowable mold protrusion is 0.254 mm on D1 and E1 dimensions.
- "N" is the total number of terminals.
- These dimensions to be determined at datum plane -H- .
- The top of package is smaller than the bottom of package by 0.15 millimeters.
- Dimension b does not include dambar protrusion. allowable dambar protrusion shall be 0.08mm total in excess of the b dimension at maximum material condition. Dambar cannot be located on the lower radius or the foot.
- Controlling dimension: millimeter.
- This outline conforms to jecdec publication 95 registration MS-026, variations ACB, ACC, ACD & ACE.
- A1 is defined as the distance from the seating plane to the lowest point of the package body.
- Dimension D2 and E2 represent the size of the exposed pad.
- Exposed pad shall be coplanar with bottom of package within 0.05.
- JEDEC variation.