

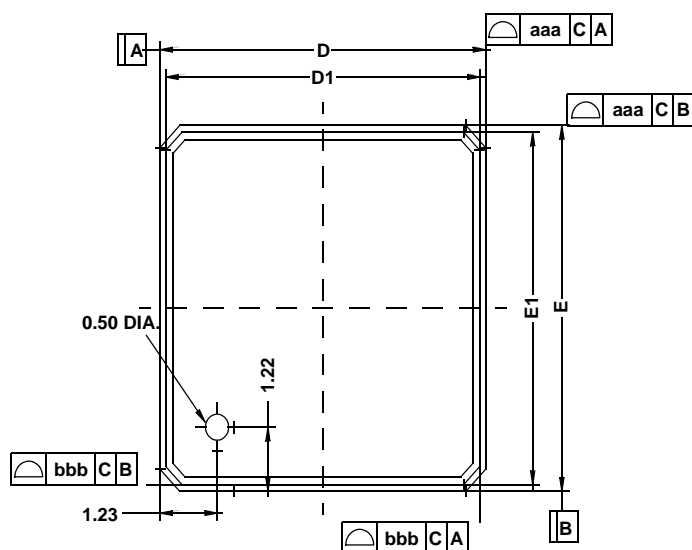
Plastic Packages for Integrated Circuits

Package Outline Drawing

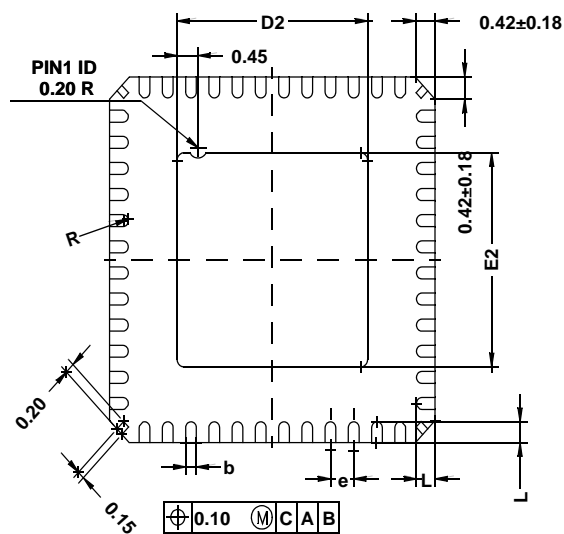
L48.7x7Y

48 LEAD QUAD FLAT NO-LEAD PLASTIC PACKAGE (PUNCH-QFN)

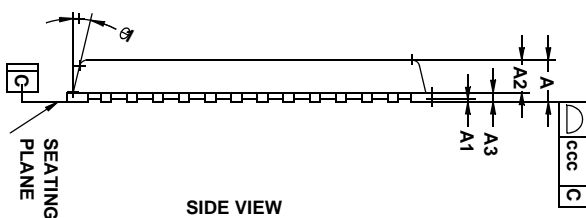
Rev 0 10/12)



TOP VIEW



BOTTOM VIEW



SIDE VIEW

SYMBOL	MILLIMETERS			INCH		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	0.90	-	-	0.035
A1	0.00	0.01	0.05	0.00	0.0004	0.002
A2	-	0.65	0.70	-	0.026	0.028
A3	0.20 REF.			0.008 REF.		
b	0.18	0.23	0.28	0.007	0.009	0.011
D	7.00 BSC			0.276 BSC		
D1	6.75 BSC			0.266 BSC		
D2	4.00	4.10	4.20	0.157	0.161	0.165
E	7.00 BSC			0.276 BSC		
E1	6.75 BSC			0.266 BSC		
E2	4.00	4.10	4.20	0.157	0.161	0.165
L	0.30	0.40	0.50	0.012	0.016	0.020
e	0.50 BSC			0.020 BSC		
θ	0°	-	12°	0°	-	12°
R	0.075	-	-	0.003	-	-
TOLERANCES OF FORM AND POSITION						
aaa	0.10			0.004		
bbb	0.10			0.004		
ccc	0.05			0.002		

*Controlling Dimension: mm

NOTES:

- All Dimensions are in Millimeters.
- Die Thickness allowable is 0.305mm maximum (0.012 inches maximum).
- Dimensioning and Tolerances conform to ASME Y14.5M-1994.
- Dimension applies to plated terminal and is measured between 0.20 and 0.25mm from terminal tip.
- The pin #1 identifier must be placed on the top surface of the package by using indentation mark or other feature of package body.
- Exact shape and size of this feature is optional.
- Package warpage Max 0.08mm.
- Applied for exposed pad and terminals exclude embedding part of exposed pad from measuring.
- Applied only to terminals.
- Package corners unless otherwise specified are R0.175±0.025mm.