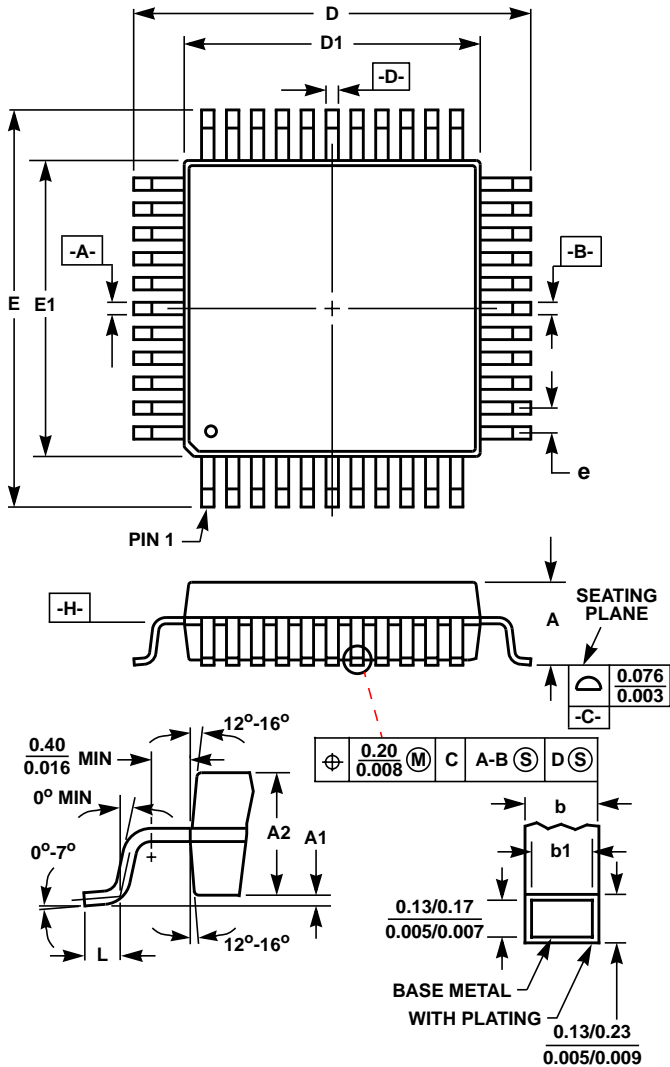


Metric Plastic Quad Flatpack Packages (MQFP)



Q144.28x28 (JEDEC MS-022DC-1 ISSUE B)
144 LEAD METRIC PLASTIC QUAD FLATPACK PACKAGE

| SYMBOL | INCHES | | MILLIMETERS | | NOTES |
|--------|-----------|-------|-------------|-------|-------|
| | MIN | MAX | MIN | MAX | |
| A | - | 0.161 | - | 4.10 | - |
| A1 | 0.010 | - | 0.25 | - | - |
| A2 | 0.126 | 0.142 | 3.20 | 3.60 | - |
| b | 0.009 | 0.015 | 0.22 | 0.38 | 6 |
| b1 | 0.009 | 0.013 | 0.22 | 0.33 | - |
| D | 1.223 | 1.233 | 31.08 | 31.32 | 3 |
| D1 | 1.097 | 1.107 | 27.88 | 28.12 | 4, 5 |
| E | 1.224 | 1.232 | 31.10 | 31.30 | 3 |
| E1 | 1.098 | 1.106 | 27.90 | 28.10 | 4, 5 |
| L | 0.029 | 0.040 | 0.73 | 1.03 | - |
| N | 144 | | 144 | | 7 |
| e | 0.026 BSC | | 0.65 BSC | | - |

Rev. 1 4/99

NOTES:

1. Controlling dimension: MILLIMETER. Converted inch dimensions are not necessarily exact.
2. All dimensions and tolerances per ANSI Y14.5M-1982.
3. Dimensions D and E to be determined at seating plane -C-.
4. Dimensions D1 and E1 to be determined at datum plane -H-.
5. Dimensions D1 and E1 do not include mold protrusion. Allowable protrusion is 0.25mm (0.010 inch) per side.
6. Dimension b does not include dambar protrusion. Allowable dambar protrusion shall be 0.08mm (0.003 inch) total.
7. "N" is the number of terminal positions.