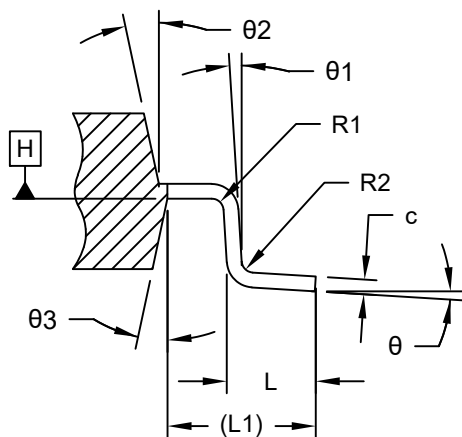
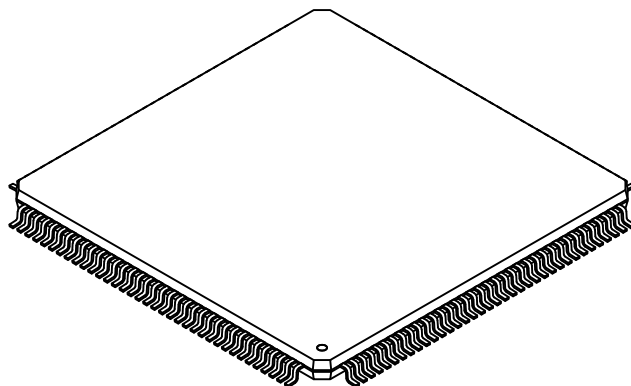


144-Lead Plastic Thin Quad Flat Pack (Z8X) - 20x20x1.0 mm Body [TQFP] SMSC Legacy Package VTQE3

Note: For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>



SECTION A-A



Units		MILLIMETERS		
Dimension Limits		MIN	NOM	MAX
Number of Terminals	N	144		
Pitch	e	0.50 BSC		
Overall Height	A	-	-	1.20
Standoff	A1	0.05	-	0.15
Molded Package Thickness	A2	0.95	1.00	1.05
Overall Length	D	22.00 BSC		
Molded Package Length	D1	20.00 BSC		
Overall Width	E	22.00 BSC		
Molded Package Width	E1	20.00 BSC		
Terminal Width	b	0.17	0.22	0.27
Terminal Thickness	c	0.09	-	0.20
Terminal Length	L	0.45	0.60	0.75
Footprint	L1	1.00 REF		
Lead Bend Radius	R1	0.08	-	-
Lead Bend Radius	R2	0.08	-	0.20
Foot Angle	θ	0°	3.5°	7°
Lead Angle	$\theta 1$	0°	-	-
Mold Draft Angle	$\theta 2$	11°	12°	13°
Mold Draft Angle	$\theta 3$	11°	12°	13°

Notes:

- Pin 1 visual index feature may vary, but must be located within the hatched area.
- Dimensioning and tolerancing per ASME Y14.5M
BSC: Basic Dimension. Theoretically exact value shown without tolerances.
REF: Reference Dimension, usually without tolerance, for information purposes only.