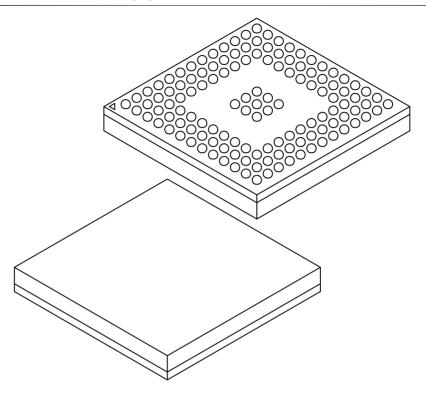
## 129-Ball Thin Fine Pitch Ball Grid Array (2H) - 7x7 mm Body [TFBGA]

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



Units		MILLIMETERS		
Dimension Limits		MIN	NOM	MAX
Number of Terminals	N	129		
Pitch	е	0.50 BSC		
Overall Height	Α	-	-	1.20
Standoff	A1	0.20	0.24	0.28
Mold Thickness	A2	0.65 REF		
Substrate Thickness	А3	0.21 REF		
Overall Length	D	7.00 BSC		
Overall Terminal Spacing	D1	6.00 BSC		
Overall Width	Е	7.00 BSC		
Overall Terminal Spacing	E1	6.00 BSC		
Terminal Diameter	b	0.25	0.30	0.35

## Notes:

- 1. Pin 1 visual index feature may vary, but must be located within the hatched area.
- 2. 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.