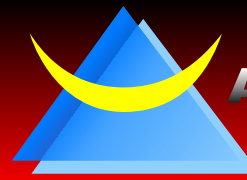


T2A SERIES

- 5mm x 7mm Ceramic SMD 10 Pads
- 3.3 Volt
- Clipped Sinewave Output
- Stability Down to $\pm 0.5\text{ppm}$



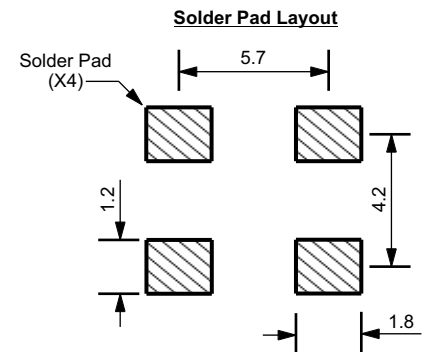
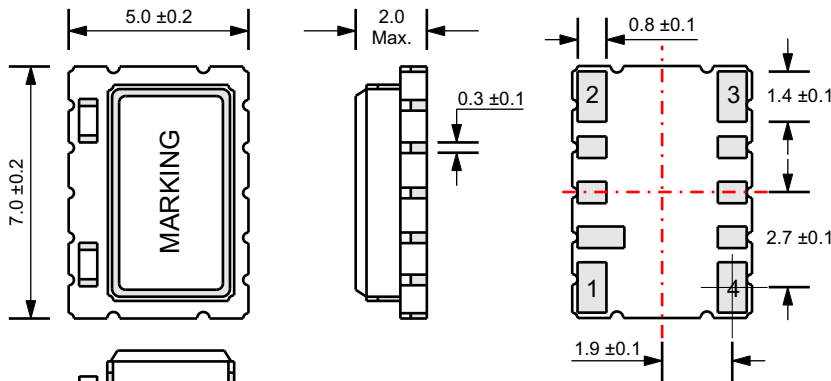
ASCEND

FREQUENCY DEVICES

Electrical Specifications

| | | |
|------------------------------|---|--|
| Frequency Range: | - | 10.000MHz to 40.000MHz |
| Frequency Stability: | vs. Operating Temperature Range vs. Supply Voltage ($\pm 5\%$) vs. Load ($\pm 10\%$) vs. Aging | $\pm 0.5\text{ppm}$ to $\pm 5\text{ppm}$ $\pm 0.2\text{ppm}$ Maximum $\pm 0.2\text{ppm}$ Maximum $\pm 1.0\text{ppm/year}$ Maximum |
| Operating Temperature Range: | - | 0°C to $+55^\circ\text{C}$ to -40°C to $+85^\circ\text{C}$ |
| Storage Temperature Range: | - | -55°C to $+125^\circ\text{C}$ |
| Supply Voltage (Vdd): | - | 3.3Vdc $\pm 5\%$ or 5.0Vdc $\pm 5\%$ |
| Supply Current: | 10.000MHz to 14.999MHz 15.000MHz to 25.999MHz 26.000MHz to 40.000MHz | 1.5mA Maximum 2.0mA Maximum 2.5mA Maximum |
| Output Level: | Clipped Sine | 0.8Vp-p Minimum |
| Load: | - | 10K Ohms // 10pF |
| Vc Input Impedance: | - | 1.0M Ω Minimum |
| Phase Noise: | at 13.000MHz | -115dBc/Hz at 100Hz, -135dBc/Hz at 1KHz, -148dBc/Hz at 10KHz |
| Start-up Time: | - | 2mSec Maximum |

Mechanical Dimensions



| Pad | FUNCTION |
|-----|-----------------------------|
| 1 | Vcon: VC-TCXO; Ground: TCXO |
| 2 | Ground |
| 3 | Output |
| 4 | Supply Voltage |

MARKING

Line 1: AXX.XXX
Line 2: XXXXXX (Date Code)

ALL DIMENSIONS
IN MILLIMETERS

Part Numbering Guide

T2A 3 S 15 Z A - 33.000M

| | |
|--|---|
| <p>Series 5 x7 Ceramic SMD 10 Pads TCXO (RoHS Compliant)</p> <p>Supply Voltage 5 = 5.0V 3 = 3.3V</p> <p>Output Type S = Clipped Sinewave</p> <p>Frequency Stability* 05 = $\pm 0.5\text{ppm}$ 10 = $\pm 1.0\text{ppm}$ 15 = $\pm 1.5\text{ppm}$ 20 = $\pm 2.0\text{ppm}$ 25 = $\pm 2.5\text{ppm}$ 30 = $\pm 3.0\text{ppm}$ 40 = $\pm 4.0\text{ppm}$ 50 = $\pm 5.0\text{ppm}$</p> | <p>Frequency</p> <p>Operating Temperature Range A = 0°C to $+55^\circ\text{C}$ B = -10°C to $+60^\circ\text{C}$ C = -20°C to $+70^\circ\text{C}$ D = -30°C to $+85^\circ\text{C}$ E = -40°C to $+85^\circ\text{C}$</p> <p>Pulling Range R = $\pm 5\text{ppm}$ U = $\pm 8\text{ppm}$ V = $\pm 10\text{ppm}$ W = $\pm 12\text{ppm}$ X = $\pm 15\text{ppm}$ Y = $\pm 20\text{ppm}$ Z = $\pm 25\text{ppm}$ T = TCXO</p> |
|--|---|

* Check with factory for additional Stability vs. Temperature options