

ULTRA MINIATURE (5x3.2x1.2mm) SMD TCXO/VCTCXO IN LCC PACKAGE - TC53A Series

FEATURES

- RoHS Compliant (Pb-Free), Tight Stability over Wide Temperature Range
- Voltage Control Option for Electric Frequency Adjustments
- Leadless Chip Carrier (LCC) Miniature Small Package, Industry de factor Standard Footprint
- Small Size, Low Profile, Light Weight and Low Power Consumption

SPECIFICATIONS

Frequency Range 10.000 MHz to 40.000 MHz

 Input Voltage (Vcc)
 A=5.0V±5%; B=3.3V±5%; C=3.0V±5%

 Input Current
 2.0 mA Maximum (at 3V, 25°C)

Storage Temperature -40°C to 85°C

Frequency Stability vs Temp.

Temperature Range Standard Stability 015 = ±1.5 ppm; 020 = ±2 ppm; 025 = ±2.5 ppm; 050 = ±5 ppm A = 0°C to 70°C; B = -40°C to 85°C; F = 0°C to 50°C; H = -30°C to 75°C

 $025H = \pm 2.5 \text{ ppm} / -30^{\circ}\text{C to } 75^{\circ}\text{C}$

Frequency Stability vs Vcc

Frequency Stability vs Load

 ± 0.2 ppm Maximum / Vcc $\pm 5\%$ ± 0.2 ppm Maximum / 10 kOhms or 10 pF $\pm 10\%$

Aging

±1 ppm Maximum per year @25°C

Output Load10 kOhms or 10 pF ±10%Output WaveformClipped Sine waveOutput Level0.8Vp-p MinimumStart-up Time2 ms (Typical)SSB Phase Noise-125 dBc/Hz at 1 KHz

Control Voltage (Vc, Option)

+2.5±1.0 VDC for Vcc = 5.0V; 1.5±1.0 VDC for Vcc = 3.0V

Controllable Frequency Range ±12 ppm Minimum for Vcc = 5.0V; ±8 ppm Minimum for Vcc = 3.0V

Creating a Part Number



OUTLINE DRAWING

