

Temperature Compensated Crystal Oscillators



ULTRA MINIATURE (2.5x2.0x0.9 mm) HIGH STABILITY SMD TCXO/VCTCXO - TC22A Series

FEATURES

- RoHS Compliant (Pb-Free), Tight Stability (± 0.5 ppm) over Wide Temperature Range
- Voltage Control Option for Electric Frequency Adjustments
- Leadless Chip Carrier (LCC) Miniature Small Package, Industry de factor Standard Footprint
- Ultra Small Size, Low Profile, Light Weight and Low Power Consumption

SPECIFICATIONS

Frequency Range	10.000 MHz to 52.000 MHz
Available Frequencies	13, 16, 16.367667, 16.368, 16.369, 16.8, 17.5, 19.2 20, 26, 27.456, 38.4, 40, 52 MHz
Input Voltage (Vcc)	1.7 - 3.3 VDC
Input Current	1.5 mA Maximum (at Vcc = 1.8V, 10kOhms//10 pF)
Storage Temperature	-40°C to 85°C
Frequency Tolerance	± 1.0 ppm Maximum at 25°C
Frequency Stability vs Temp.	± 0.5 ppm / -30°C to 85°C, at Vc = 0.9 VDC
Frequency Stability vs Vcc	± 0.2 ppm Maximum / Vcc $\pm 5\%$
Frequency Stability vs Load	± 0.2 ppm Maximum / 10 kOhms or 10 pF $\pm 10\%$
Aging	± 1 ppm Maximum one year at 25°C
Output Load	10 kOhms or 10 pF $\pm 10\%$
Output Waveform	Clipped Sine wave
Output Level	0.8Vp-p Minimum
Start-up Time	4 ms (Typical)
SSB Phase Noise (Typ)	-110 dBc/Hz at 100 Hz -130 dBc/Hz at 1KHz -145 dBc/Hz at 10KHz -145 dBc/Hz at 100KHz
Control Voltage (Vc, Option)	+0.9 \pm 0.6 VDC
Controllable Frequency	± 3 to ± 5 ppm over control voltage range, positive slope
Part Number	TC22A-Freq (i.e. TC22A-52M000)

OUTLINE DRAWING

