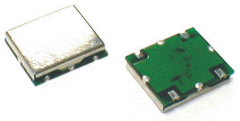

TRUE SINEWAVE SMD (11.4x9.6x2.5 mm) TCXO/VCTCXO IN LEADLESS PACKAGE - TCLS Series

FEATURES

- RoHS Compliant (Pb-Free), True Sine Wave Output
- Voltage Control Option for Electric Frequency Adjustments
- High Reliability with ASIC Circuit, Trimmerless, Reflow Soldering
- SMD Miniature Size, Industry de factor Standard Footprint

SPECIFICATIONS

Frequency Range	10.000 MHz to 20.000 MHz
Standard Frequency	10.0/10.24/12.0/12.8/13.0/16.0/16.384/16.8/19.2/19.44/19.80 MHz
Supply Voltage (Vcc)	A = 5.0 VDC ± 5%; B = 3.3 VDC ± 5%; C = 3.0 VDC ± 5%
Input Current	2.0 mA Maximum
Storage Temperature	-40°C to 125°C
Controllable Frequency Option	V = Voltage control option: ±8 ppm Minimum
Control Voltage (Vc)	2.5±2.0 VDC for Vcc = 5 VDC; 1.5±1.0 VDC for Vcc = 3 VDC
Setability of Vc at Fnom, 25°C	2.5±0.5 VDC for 5.0V part; 1.5±0.4 VDC for 3.0V part
Frequency Stability vs Temp.	±2.5 ppm Maximum / -30°C to 80°C
Frequency Stability vs Vcc	±0.3 ppm Maximum / Vcc ± 5%
Frequency Stability vs Load	±0.3 ppm Maximum / 10 kOhms or 10 pF ±10%
Aging	±1 ppm Maximum per year @25°C
Output Load	10 kOhms or 10 pF ±10%
Output Waveform	Sine wave
Output Level	0.8Vp-p Minimum
Start-up Time	2 ms Typical at 90% Final output level
Phase Noise (Max)	-135 dBc/Hz at 1KHz; -140 dBc/Hz at 10KHz
Typical Part Number	TCLS-Frequency-Vcc-Voltage control option
P/N Example	TCLS-12M800-A: Leadless SMD TCXO in 11.4x9.6x2.5 mm package, Sine wave output, 12.800 MHz, +5 VDC supply voltage, ±2.5 ppm / -30°C to 80°C

OUTLINE DRAWING