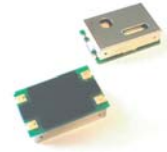


Temperature Compensated Crystal Oscillators



SINEWAVE HIGH FREQUENCY TCXO IN 4 PAD SMD PACKAGE - TCLS2 Series

FEATURES

- RoHS Compliant (Pb-Free), Tight Stability over Wide Temperature Range
- High Frequency Based on 3rd O/T Crystals
- Sinewave Output, Low Phase Noise
- Industry de factor Standard SMD Footprint, Frequency Adjustment Through Internal Trimmer

SPECIFICATIONS

Frequency Range	45 MHz to 190 MHz
Supply Voltage (Vcc)	A = 5.0 VDC \pm 5%; B = 3.3 VDC \pm 5%
Input Current	30 mA Maximum
Storage Temperature	-55°C to 125°C
Controllable Frequency Option	I = Internal trimmer: \pm 3 ppm Minimum
Control Voltage (Vc)	2.5 \pm 2.0 VDC for Vcc = 5 VDC; 1.65 \pm 1.5 VDC for Vcc = 3.3 VDC
Setability of Vc at Fnom, 25°C	2.5 \pm 0.5 V DC for 5.0V part; 1.65 \pm 0.4 VDC for 3.3V part
Frequency Stability vs Temp. Temperature Range	005 = \pm 0.5 ppm; 010 = \pm 1 ppm; 015 = \pm 1.5 ppm; 020 = \pm 2 ppm; 050 = \pm 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
Standard Stability	025H = \pm 2.5 ppm / -30°C to 75°C
Frequency Stability vs Vcc	\pm 0.2 ppm Maximum / Vcc \pm 5%
Frequency Stability vs Load	\pm 0.2 ppm Maximum / 15 pF \pm 10%
Aging	\pm 1 ppm Maximum per year @25°C
Phase Noise (Typ)	-80 dBc/Hz at 10Hz; -120 dBc/Hz at 100Hz; -135 dBc/Hz at 1KHz -140 dBc/Hz at 10KHz; -145 dBc/Hz at 100KHz
Output Load	50 Ohms
Output Waveform	Sine wave
Output Level	0 dBm Typ for 3.3V part; 10 dBm Typ for 5.0V part

Creating a Part Number

TCLS2-100M000-A I 010A

Product Series	TCLS2	Operating Temperature Range: A = 0 to 70°C
Frequency	100M	Frequency Stability: B = -40 to 85°C
Supply Voltage: A = 5.0V	000	010 = \pm 1.0 ppm
B = 3.3V	A	020 = \pm 2 ppm
	I	025 = \pm 2.5 ppm
	010	H = -30 to 75°C
	A	X = Customized Temp Range

OUTLINE DRAWING

