

### 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)  $A = 5.0 \text{ VDC} \pm 5\%$ ;  $B = 3.3 \text{ VDC} \pm 5\%$ 

Input Current30 mA MaximumStorage Temperature-55°C to 125°C

**Controllable Frequency Option** I = Internal trimmer: ±3 ppm Minimum

Control Voltage (Vc)

2.5±2.0 VDC for Vcc = 5 VDC; 1.65±1.5 VDC for Vcc = 3.3 VDC

Setability of Vc at Fnom, 25°C 2.5±0.5 V DC for 5.0V part; 1.65±0.4 VDC for 3.3V part

Frequency Stability vs Temp.

Temperature Range Standard Stability

 $005 = \pm 0.5$  ppm;  $010 = \pm 1$  ppm;  $015 = \pm 1.5$  ppm;  $020 = \pm 2$  ppm;  $050 = \pm 5$  ppm

 $A = 0^{\circ}C$  to  $70^{\circ}C$ ;  $B = -40^{\circ}C$  to  $85^{\circ}C$ ;  $F = 0^{\circ}C$  to  $50^{\circ}C$ ;  $H = -30^{\circ}C$  to  $75^{\circ}C$ 

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

Frequency Stability vs Vcc Frequency Stability vs Load

Aging

±0.2 ppm Maximum / Vcc ± 5% ±0.2 ppm Maximum / 15 pF ± 10% ±1 ppm Maximum per year @25°C

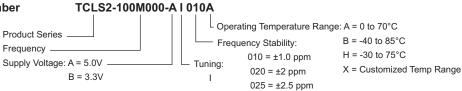
Phase Noise (Typ) -80 dBc/Hz at 10Hz; -120 dBc/Hz at 100Hz; -135 dBc/Hz at 1KHz

-140 dBc/Hz at 10KHz; -145 dBc/Hz at 100KHz

Output Load50 OhmsOutput WaveformSine wave

Output Level 0 dBm Typ for 3.3V part; 10 dBm Typ for 5.0V part

# **Creating a Part Number**



## **OUTLINE DRAWING**

