

## ULTRA MINIATURE (2.5x2.0x0.9 mm) SMD VCTCXO IN LCC PACKAGE - TC22 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
- Ultra Small Size, Low Profile, Light Weight and Low Power Consumption

#### **SPECIFICATIONS**

Frequency Range 10.000 MHz to 52.000 MHz

Input Voltage (Vcc) B =  $3.3V \pm 5\%$ ; C =  $3.0V \pm 5\%$ ; D =  $2.8V \pm 5\%$ 

Input Current 2.2 mA Maximum (at 3V, 25°C)

Storage Temperature -40°C to 85°C

Frequency Stability vs Temp.

Temperature Range

 $005 = \pm 0.5$  ppm;  $010 = \pm 1$  ppm;  $025 = \pm 2.5$  ppm (not all combination is available)

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

Frequency Tolerance ±1.5 ppm Maximum, after 2time reflow, @25°C

Frequency Stability vs Vcc ±0.2 ppm Maximum / Vcc ± 10%

Frequency Stability vs Load ±0.2 ppm Maximum / 10 kOhms or 10 pF ±10%

Aging ±1.0 ppm Maximum per year @25°C

Output Load 10 kOhms or 10 pF ±10%

Output Waveform Clipped Sine wave; Harmonics: -5 dBc Maximum

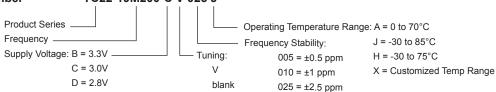
Output Level 0.8Vp-p Minimum Start-up Time 4 ms (Typical)

SSB Phase Noise -130 dBc/Hz at 1KHz (Typical)

**Control Voltage (Vc, Option)** +1.4V ±1.0V, Positive polarity

Controllable Frequency ±3 ppm to ±5 ppm over control voltage range (0.4V to 2.4V)

# Creating a Part Number TC22-19M200-C V 025 J



### **OUTLINE DRAWING**

