

## ULTRA MINIATURE (3.2x2.5x1.2mm) SMD VCTCXO IN LCC PACKAGE - TC32 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 38.400 MHz  |
|------------------------------|---|
| Standard Frequency           | 13.0MHz, 16.3676MHz, 19.20MHz, 19.68MHz, 24.5535MHz, 26.00MHz   |
| Input Voltage (Vcc)          | 2.5 - 3.5 VDC; C = 3.0VDC ± 5% Typ  |
| Input Current                | 2.2 mA Maximum (at 3V, 25°C)  |
| Storage Temperature          | -40°C to 85°C   |
| Frequency Stability vs Temp. | ±2.5 ppm Maximum / -30°C to 80°C  |
| Frequency Stability vs Vcc   | ±0.2 ppm Maximum / Vcc ± 5%   |
| Frequency Stability vs Load  | ±0.2 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              | Clipped Sine wave   |
| Output Level                 | 0.8Vp-p Minimum   |
| Start-up Time                | 4 ms (Typical)  |
| SSB Phase Noise              | -140 dBc/Hz at 10 KHz   |
| Control Voltage (Vc)         | +1.5±1.0 VDC  |
| Controllable Frequency       | ±9 ppm Minimum over control voltage range (0.5 VDC to 2.5 VDC)  |
| Typical Part Number          | TC32-Frequency-CV   |
| P/N Example                  | TC32-26M000-CV:<br>VCTCXO in 3.2x2.5x1.5 mm LCC package, Clipped sine wave output, 26.00 MHz<br>+3.0 VDC supply voltage, ±2.5 ppm / -30°C to 80°C, Voltage control option |

## **OUTLINE DRAWING**

