



Features

- Frequency 10 MHz
- 7mm x 5mm x 1.85mm ceramic SMD
- Compact and lightweight
- Low power consumption
- Low cost | excellent stability

Typical Applications

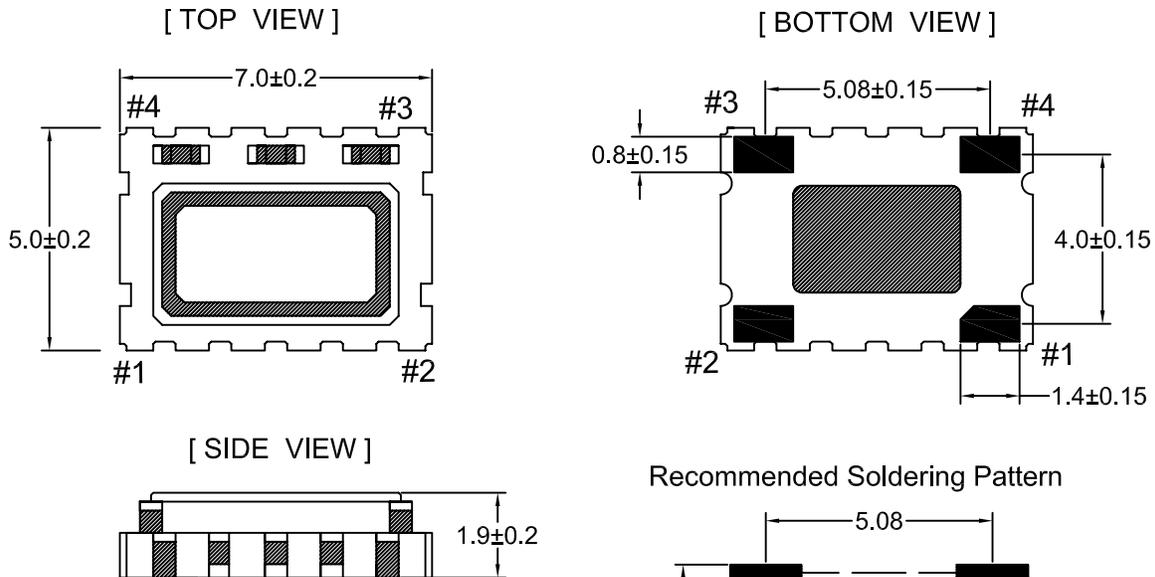
- Femtocell base stations
- Wireless Communications
- WLAN | WiMAX | WIFI

Description

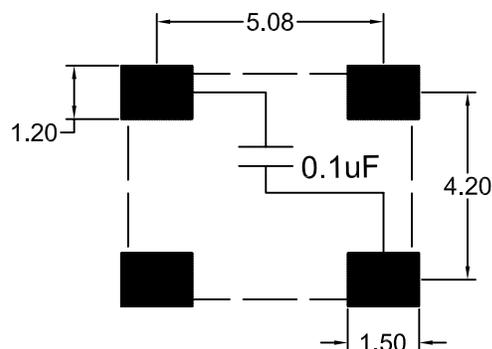
The TCXO3403 family offers low noise compensation techniques combined with high volume manufacturing processes resulting in low cost , tightly distributed performance parameters, and very good overall long term frequency stability and reliability.

Mechanical Drawing and PIN Connections

Drawing No: MD130008-2



Recommended Soldering Pattern



| PIN | FUNCTION |
|-----|-------------------------------|
| #1 | Vcon: VC-TCXO GND/NC: TCXO |
| #2 | GND |
| #3 | OUTPUT |
| #4 | VDD |

Unit in mm
 1mm = 0.0394 inches



Specifications

| TCXO Specification | | Sym. | Condition | Value | | | Unit | Note |
|--|------------------|--|--|--------|-----------|--------|--------|-----------------------------|
| | | | | Min. | Typ. | Max. | | |
| Operational Frequency Range | | f_0 | | | 10.000000 | | MHz | |
| Clipped Sine-wave Option | Level | L | | 0.8 | | | Vpk-pk | |
| | Load Resistance | RL | | | 10 | | Kohm | |
| | Load Capacitance | CL | | | 10 | | pF | |
| Power supply | | | | | | | | |
| Voltage | | Vcc | | 3.135 | 3.300 | 3.465 | V | |
| Current consumption | | Icc | | | | 2.5 | mA | |
| Frequency control* | | | | | | | | |
| Control voltage range | | Vc | | 0.5 | 1.65 | 3.3 | V | Positive tuning slope |
| Tuning range | | | | +/- 8 | | | ppm | |
| Vc Input Impedance | | | | | | 500 | Kohm | |
| Frequency stability | | | | | | | | |
| vs. temperature | | | -40°C to +85°C, ref 25°C | -0.5 | | +0.5 | ppm | |
| vs. 5% change in supply voltage | | | ref Vcc typ. | -0.200 | | +0.200 | ppm | |
| Tolerance at 25C | | | | -1.0 | | +1.0 | ppm | Frequency 1 hr after reflow |
| SSB Phase noise | | | 10 Hz | | | | dBc/Hz | |
| | | | 100 Hz | | -115 | | | |
| | | | 1 kHz | | -135 | | | |
| | | | 10 kHz | | -140 | | | |
| | | | 100 kHz | | -145 | | | |
| Aging | Per Year | | Projected yearly aging after 30 days operation | -1.0 | | +1.0 | ppm | |
| Environmental, mechanical conditions. | | | | | | | | |
| Operating temperature range | | -40°C to +85°C maximum range available that is standard | | | | | | |
| Storage temperature range | | -55°C to +125°C | | | | | | |
| Mechanical shock | | | | | | | | |
| Vibration | | | | | | | | |
| Soldering | | | | | | | | |