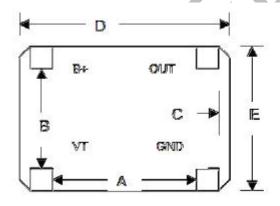
Features and Benefits

Better than +/- 2.0 ppm from -40°C to +85°C 100.000000 MHz low noise 7 dBm sine output 3.3V supply; 35 mA typ. +/- 8 ppm pull min. with 1.65V +/- 1.65V control

Typical Applications

Mobile SATCOM Mobile Radio Harsh Environments Test Instruments

Mechanical Drawing



4 pads .10" square

Do not immerse in solvents

Specification

| TCXO Specification | Sym Condition | Value | | | 11-2 | N | |
|-------------------------------|------------------------------|--------------------------------------|-------------------------------------|--|-----------|----------|-------------------|
| | | Condition | Min. | Тур. | Max. | Unit | Note |
| Operational Frequency Range | f_0 | | | 100.000000 | | MHz | |
| 50 ohm sine | | Output Power | 7.0 | | | dBm | |
| | | Harmonics (@ 200 MHz) | | | -25.0 | dBc | |
| | | Harmonics > 200 MHz | | | -35.0 | dBc | |
| | | Sub-harmonics (50 MHz) | | | -45.0 | dBc | |
| | | Load | | | 50 | ohms | |
| Power Supply | _ | | | <u>, </u> | | | |
| Voltage | V_{CC} | | 3.130 | 3.300 | 3.470 | V | |
| Current Consumption | | | | 35 | 50 | mA | At maximum supply |
| Frequency versus Voltage | | | | | | | |
| | +/- 8 ppm min. | | | | | | |
| Pin 1: Control Voltage: | | | 0.0 | 1.65 | 3.3 | V | |
| | | | | | | | |
| Frequency Stability | | | | | | | |
| Vs. Temperature, Voltage, and | -40°C to +85°C | | | | +/- 2.000 | nnm | |
| Load Variation | | | | | | ppm | |
| @ 23°C | | Initial Accuracy at time of shipment | | | +/- 2.500 | ppm | @1.650 V for VT |
| Vs. Reflow Shift | After 24 hours settling time | | | | +/- 1.000 | ppm | Tuning Voltage |
| Aging | | | | | | | |
| | After 30 Days of Operation | | | | | | |
| | Yearly | Aging as projected | | | +/- 1.00 | ppm / yr | |
| SSB Phase Noise | _ | | | | | | |
| @ 100 MHz | | 100 Hz | | -123 | -118 | | |
| | | 1 KHz | | -140 | -135 | dBc/Hz | |
| | 10 KHz | | | -150 | -147 | | |
| | | | _ | | | | |
| E | | | | | | | |
| Environmental | | | | | | 10.71 | I |
| Soldering Method | 260°C peak for 10 sec. max | | Hand Attach. Hand Clean. Can NOT be | | | | |
| | | | immersed in solvents | | | | |