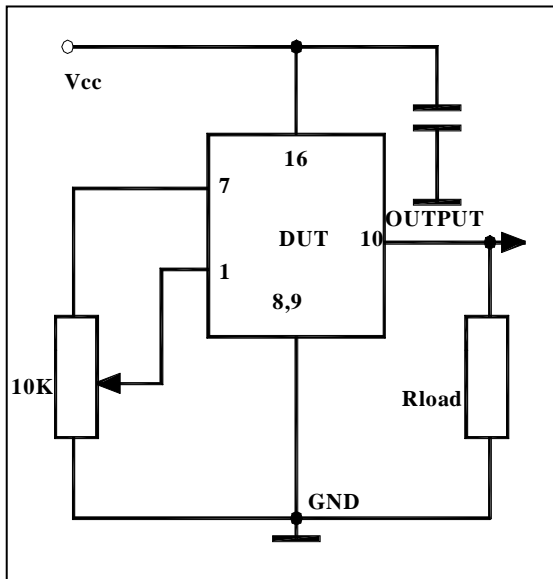
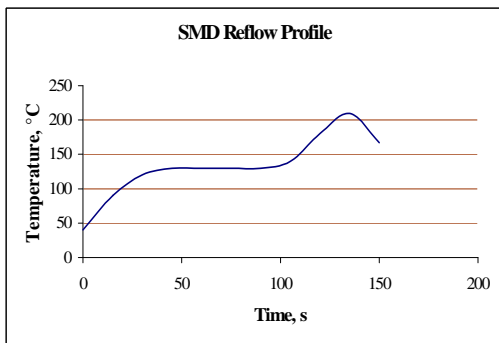


VFTCM Series OCXO

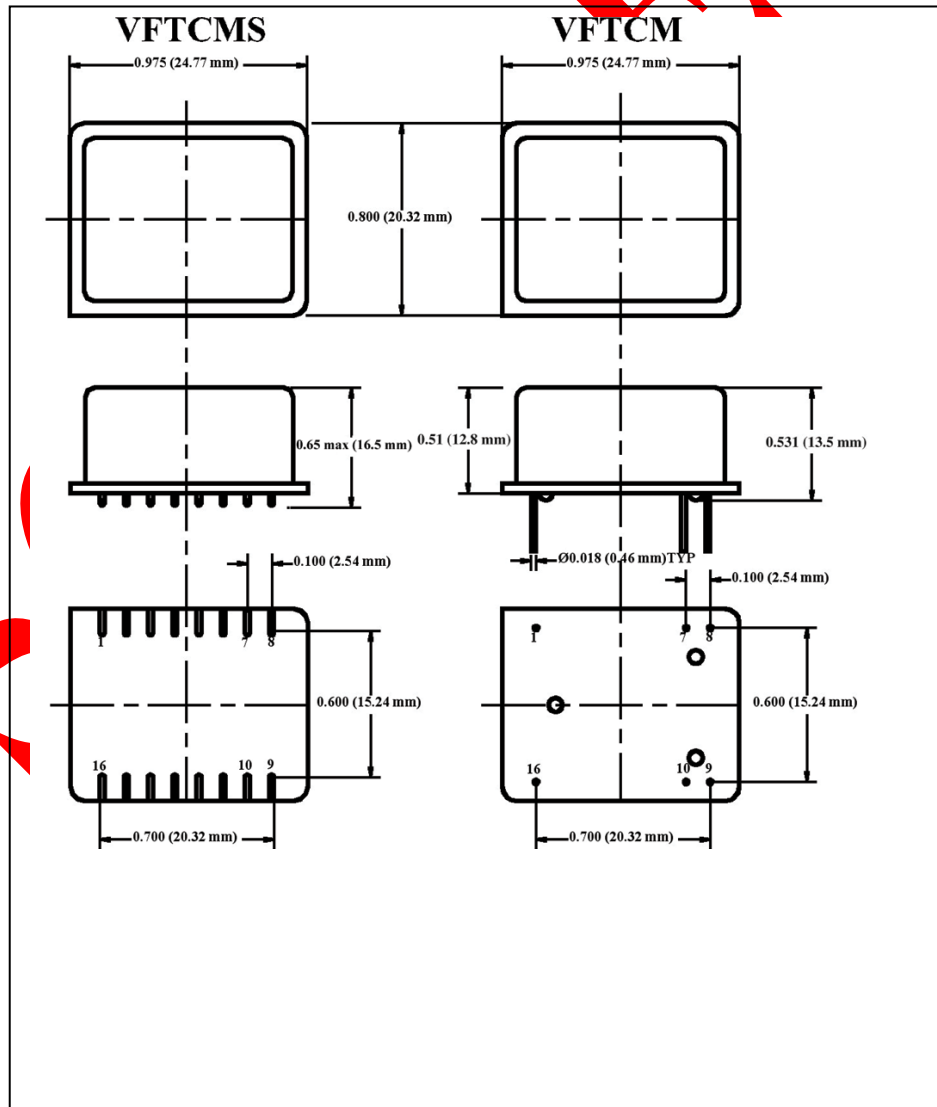
Features

- SC-cut crystal
- Through Hole (VFTCM) or SMD (VFTCMS)
- High Stability (up to $\pm 5 \times 10^{-9}$)
- Low Aging (5×10^{-10} /day, 5×10^{-8} /year)
- Low Phase Noise (-160 dBc/Hz, TYP, floor)
- Sine Wave or HCMOS/TTL output
- 4.8 MHz to 180 MHz Frequencies Available



Applications

- Telecommunication Systems
- Data Communications
- GPS
- Instrumentation



VFTCM Series OCXO

Specifications:

| Parameter | Symb | Condition | Min | Typ | Max | Unit | Note | |
|-------------------------------------|---|--|------|--------|------|---------|--|-------------------------|
| Absolute Maximum Ratings | | | | | | | | |
| Input Break Down Voltage | Vcc | | -0.5 | | 13.0 | V | | |
| Storage temper. | Ts | | -40 | | 85 | °C | | |
| Control Voltage | Vc | | -1 | | 9 | V | | |
| Electrical | | | | | | | | |
| Frequency | F | | 4.8 | 10.000 | 180 | MHz | | |
| Frequency stability | □ F/F | vs. Temp. | | ±20 | | ppb | See chart below | |
| | | vs. Supply | | 1 | 5 | ppb/V | | |
| Aging | | per day | | 5E-10 | | | after 30 days 5E-8 available | |
| | | per year | | 1E-7 | | | | |
| Allan Variance | | .1s to 10s | | 1E-11 | | | | |
| SSB Phase Noise | | 10 Hz | | -120 | | dBc/Hz | At Higher Freq. Deteriorates by 20Log N dB | |
| | | 100 Hz | | -150 | | | | |
| | | 10 KHz | | -160 | | | | |
| Retrace | | After 30 minutes | | | ±20 | ppb | | |
| G-sensitivity | | worst direction | | | ±1.0 | ppb/G | | |
| Input Voltage | Vcc | | 4.75 | 5.0 | 5.25 | V | 3.3V, 12V ±5% optional | |
| Power consumption | P | steady state, 25°C | | 0.8 | 1 | W | | |
| | | steady state, -30°C | | 1.5 | | | | |
| | | start-up @ -30°C | | 2.5 | | | | |
| Load | 10KOhm//15pF (HCMOS/TTL), 50 Ohm (Sinewave) | | | | | | | |
| Warm-up time | □ | to 0.1ppm accuracy | | 2 | 3 | minutes | | |
| Output Waveform | | 3.3V HCMOS/TTL compatible or Sinewave (>+7dBm) | | | | | | -25dB Harmonics at sine |
| Control voltage | Vc | | 0 | | 4.0 | V | To 2.8V at Vcc=3.3V | |
| Pull range | | from nominal F | ±0.5 | ±1 | | ppm | At 10 MHz | |
| Deviation slope | | Monotonic, posit | | 0.4 | | ppm/V | | |
| Setability | Vc0 | @25°C, Fnom. | 1.0 | 2.0 | 3.0 | V | | |
| Environmental and Mechanical | | | | | | | | |
| Operating temp. range | -30°C to 70°C Standard, Other options – see chart below | | | | | | | |
| Mechanical Shock | Per MIL-STD-202, 30G, 11ms | | | | | | | |
| Vibration | Per MIL-STD-202, 5G to 2000 Hz | | | | | | | |
| Soldering Conditions | 230°C for 30s Max SMD profile | | | | | | | |
| Electrical Connections | | | | | | | | |
| Pin Out | Pin #1- Vc; Pin #7- Vref; Pin #8, Pin #9 –GND ; Pin#10 – Output; Pin #16 -Vcc | | | | | | | |

All parameters for 10 MHz

Create a Part Number

