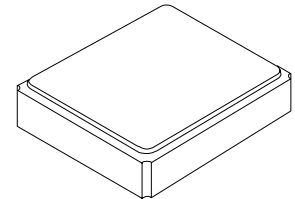




XVT9003

**19.200 MHz
VCTCXO**



SM3225-4 Case

- **Voltage Controlled Temperature Compensated Crystal Oscillator**
- **Application: Wireless Communication Devices**
- **Excellent Frequency Stability & Low Phase Noise**
- **3.2 x 2.5 x 1.3 mm Surface-Mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**



Electrical Characteristics

| Characteristic | Sym | Notes | Minimum | Typical | Maximum | Units |
|--|------|-------|----------------------------|-----------|---------|------------------|
| Nominal Frequency | Fo | | | 19.200000 | | MHz |
| Storage Temperature Range | | | -40 | | +85 | °C |
| Operating Temperature Range | | | -30 | | +80 | °C |
| Power Supply Voltage | Vcc | | | 2.8 | | V |
| Output Voltage with Load 10 pF 10K Ω | Vout | | 0.8 | | | V _{P-P} |
| Output Waveform | | | Clipped Sinewave | | | |
| Power Supply Current | Icc | | | | 1.5 | mA |
| Control Voltage | Vcon | | | 1.4±1.0 | | V |
| Control Voltage Input Impedance | | | 100K | | | ohms |
| Frequency Tolerance, Vcontrol = 1.4 V, after Two Reflows | | | ±1.5 ppm max @ 25 °C ±3 °C | | | |
| Frequency Stability versus: | | | | | | |
| Temperature, -30 to 80 °C | | | | ±2.5 | | ppm |
| Load, 10 pF 10 KΩ ±10% | | | | ±0.2 | | ppm |
| Supply Voltage, 2.8 V ±5% | | | | ±0.2 | | ppm |
| Control Voltage Frequency Range, 1.4 ±1.0 V | | | ±5.5 | | ±9.5 | ppm |
| Start Up Time, 90% of final RF level in V _{P-P} | | | | | 3.0 | ms |
| Harmonics | | | | | -5.0 | dBc |
| Aging | | | ±1.0 ppm/year @ 25 °C | | | |
| Standard Shipping Quantity on 180 mm (7") Reel | | | | 1000 | | units |
| Lid Symbolization (in addition to Lot and/or Date Codes) | | | TBD | | | |



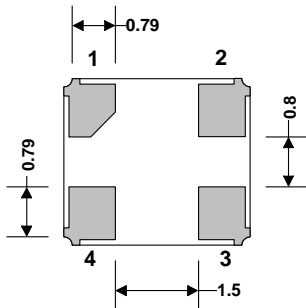
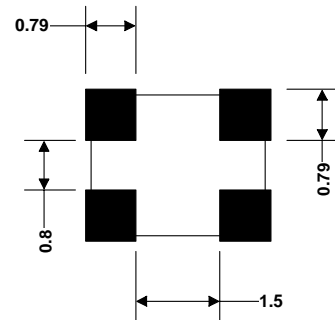
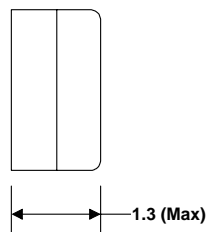
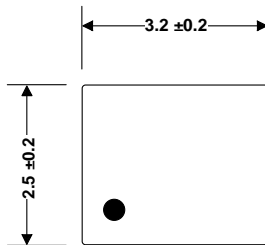
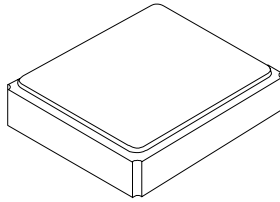
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

1. The design, manufacturing process, and specifications of this device are subject to change without notice.

SM3225-4 Case

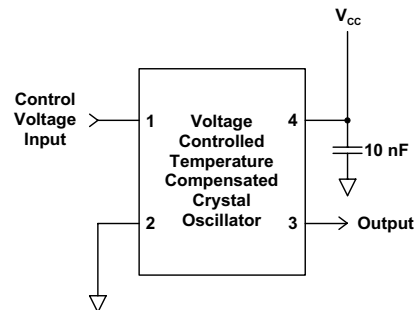
4-Terminal Surface-Mount Seam Weld Case 3.2 x 2.5 mm Nominal Footprint



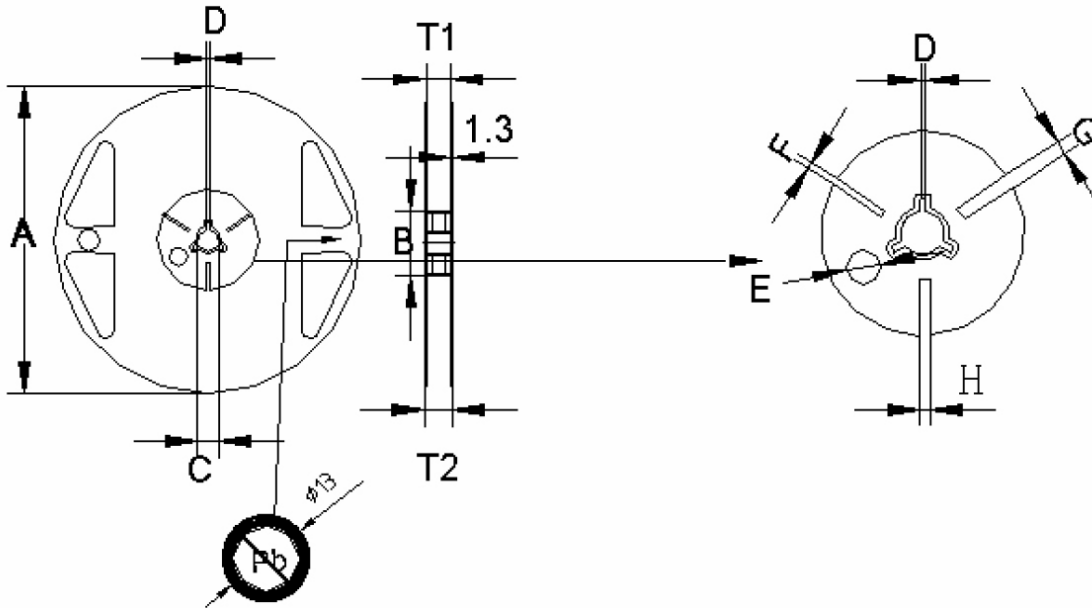
Dimensions in mm

| Pin | Connection |
|-----|--------------|
| 1 | Vcon |
| 2 | GND/CASE GND |
| 3 | Output |
| 4 | Vcc |

Application Circuit

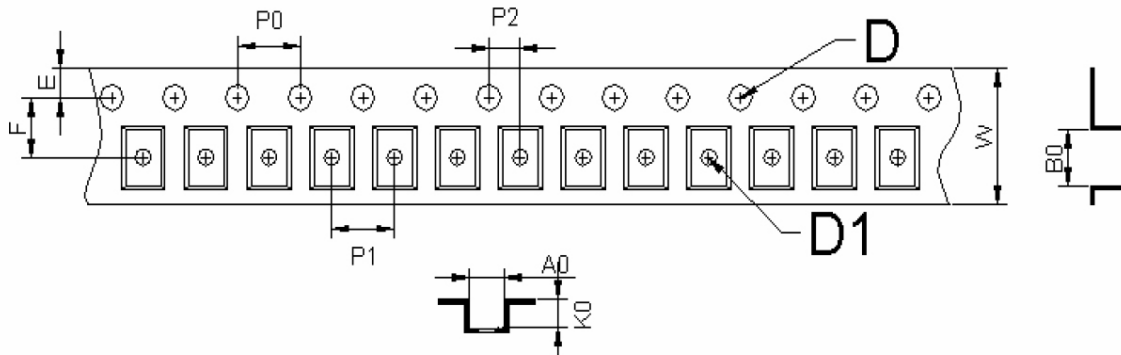


Reel Dimensions



| mm | A | B | C | D | E | F | G | H | T1 | T2 | T3 |
|-----------|------|-----------|------|------|------|------|------|------|------|------|------|
| Dimension | 180 | 60 | 13.0 | 2.0 | 9.1 | 2.9 | 4.9 | 3.9 | 9.0 | 11.4 | 1.2 |
| Tolerance | ±1.0 | +1.0/-0.0 | ±0.2 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.3 | ±1.0 | ±0.1 |

Tape Dimensions



| mm | A0 | B0 | W | F | E | P0 | P1 | P2 | D1 | D | K0 | t |
|-----------|-------|-------|-------------|-------|-------|-------|-------|-------|-------------|-------------|-------|-------|
| Dimension | 2.80 | 3.71 | 8.00 | 3.50 | 1.75 | 4.00 | 4.00 | 2.00 | 1.50 | 1.00 | 1.75 | 0.25 |
| Tolerance | ±0.10 | ±0.10 | +0.30/-0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.10 | ±0.05 | +0.10/-0.00 | +0.25/-0.00 | ±0.10 | ±0.02 |