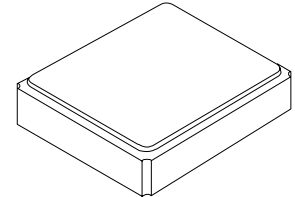


Preliminary



XVT9006

**40 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			40.000000		MHz	
Storage Temperature Range			-40		+85	°C	
Operating Temperature Range			-30		+85	°C	
Power Supply Voltage	Vcc			2.8		V	
Output Voltage with Load 10 pF 10 KΩ	Vout		0.8			Vp-p	
Output Waveform			Clipped Sinewave				
Power Supply Current	Icc				2.0	mA	
Control Voltage	Vcon			1.4±1.0		V	
Control Voltage Terminal Input Impedance			100K			ohms	
Frequency Tolerance after Reflow, Vcon = 1.5 V			±1.0 ppm max @ 25 °C ±3 °C				
Frequency Stability:						ppm	
Versus Temperature, -30 to 85 °C				±2.0		ppm	
Versus Supply Voltage, 2.8 V ±5%				±0.3			
Versus Load Variation, 10 pF 10 KΩ ±10%				±0.2			
Aging				±1 ppm			
Frequency Control Range, Vcon = 1.4±1.0 V			±10			ppm	
Start Up Time, 90% of final RF level in Vp-p					2.0	ms	
Harmonics					-5.0	dBc	
SSB Phase Noise @ 10 kHz Carrier Offset				-130 dBc/Hz max			
Standard Shipping Quantity on 180 mm (7") Reel				1000		units	
Lid Symbolization			9006 // YWWS				



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

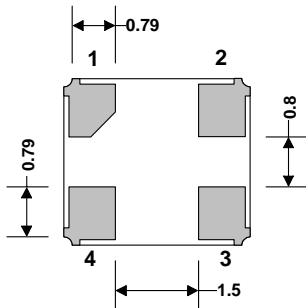
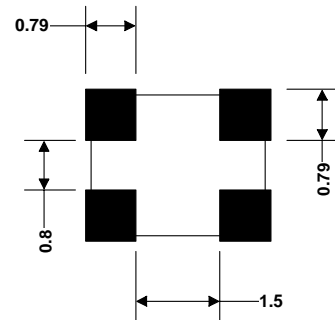
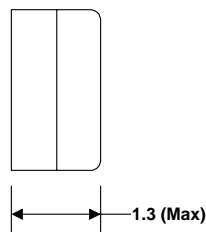
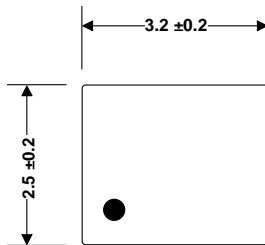
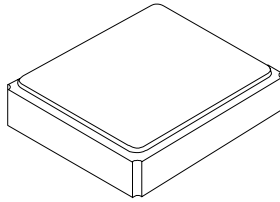
Notes:

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

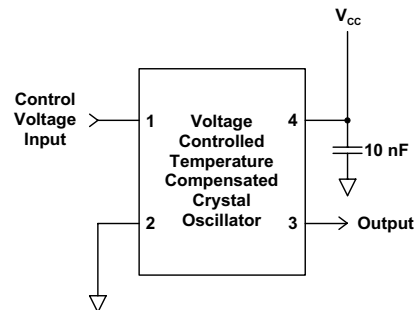
3.2 x 2.5 mm Nominal Footprint



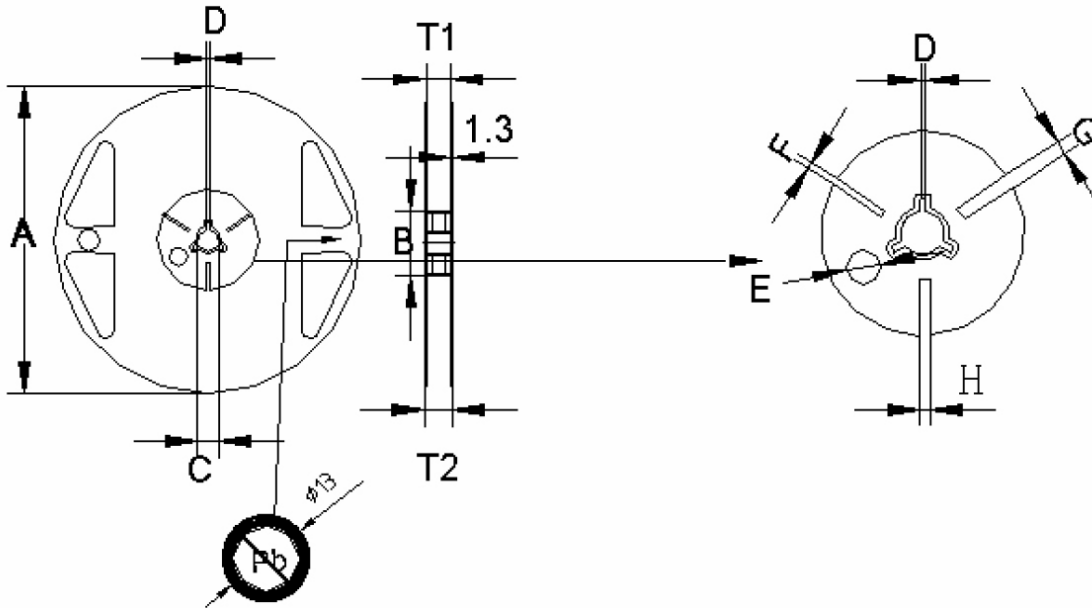
Dimensions in mm

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

Application Circuit

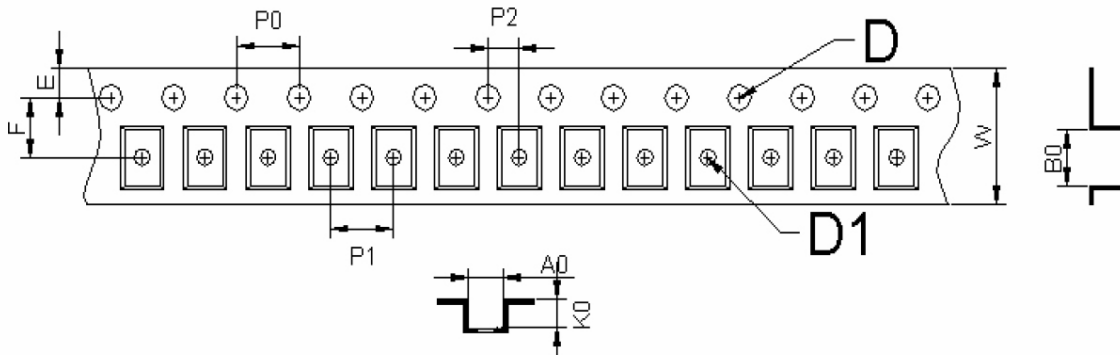


Reel Dimensions



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