

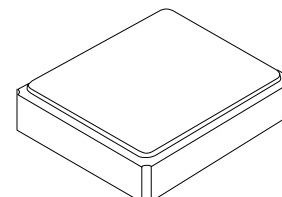


Preliminary

- **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)** 

XVT9003

**19.200 MHz
VCTCXO**



SM3225-4 Case

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 $\pm$ 1.0		V
Control Voltage Input Impedance			100K			ohms
Frequency Tolerance, Vcontrol = 1.4 V, after Two Reflows			$\pm$ 1.5 ppm max @ 25 °C $\pm$ 3 °C			
Frequency Stability versus:						
Temperature, -30 to 80 °C				$\pm$ 2.5		ppm
Load, 10 pF 10 K Ω $\pm$ 10%				$\pm$ 0.2		ppm
Supply Voltage, 2.8 V $\pm$ 5%				$\pm$ 0.2		ppm
Control Voltage Frequency Range, 1.4 $\pm$ 1.0 V			$\pm$ 5.5		$\pm$ 9.5	ppm
Start Up Time, 90% of final RF level in V _{P-P}					3.0	ms
Harmonics					-5.0	dBc
Aging			$\pm$ 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)	9003 - YWWS					



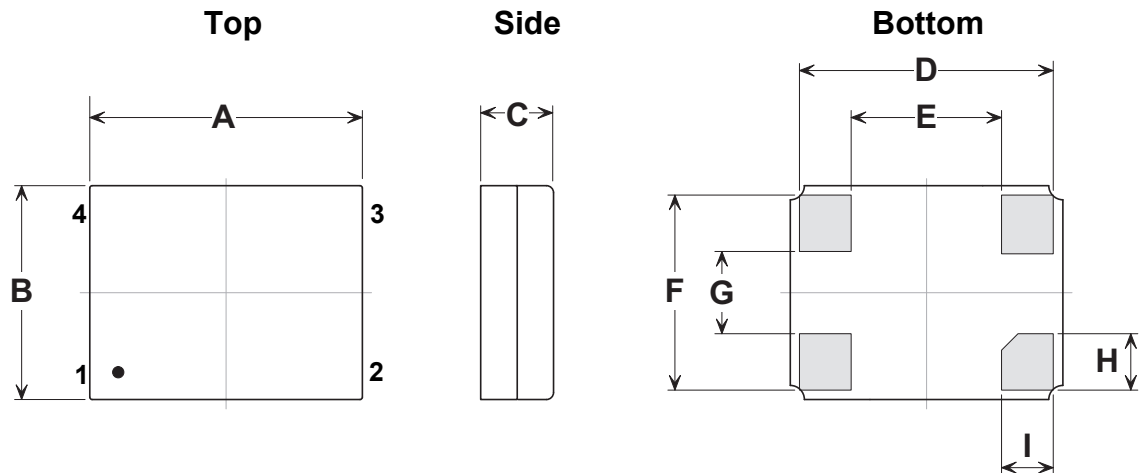
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

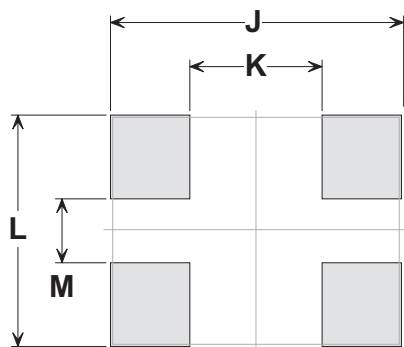
1. The design, manufacturing process, and specifications of this device are subject to change without notice.

SM3225-4 Style Case

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



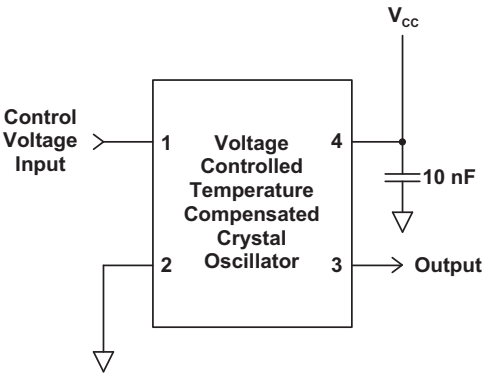
Typical PCB Land Pattern



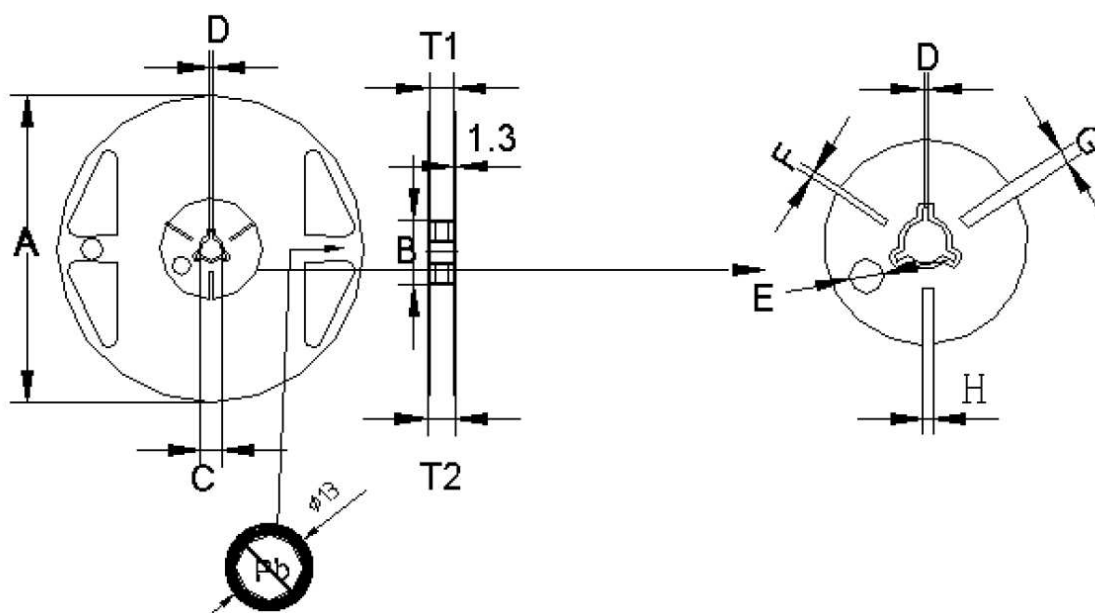
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.00	3.20	3.40	0.118	0.126	0.133
B	2.30	2.50	2.70	0.091	0.098	0.106
C	-	-	1.30	-	-	0.051
D	-	3.08	-	-	0.121	-
E	-	1.50	-	-	0.059	-
F	-	2.38	-	-	0.094	-
G	-	0.80	-	-	0.031	-
H	-	0.79	-	-	0.031	-
I	-	0.79	-	-	0.031	-
J	-	3.08	-	-	0.121	-
K	-	1.50	-	-	0.059	-
L	-	2.38	-	-	0.094	-
M	-	0.80	-	-	0.031	-

Application Circuit

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

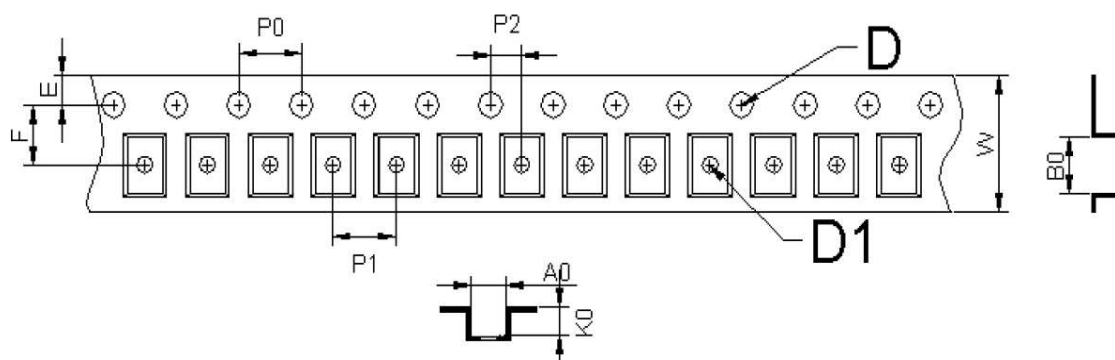


Reel Dimensions



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