

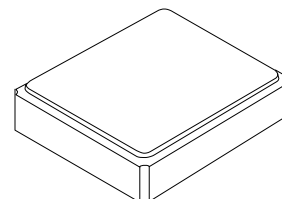


Preliminary

- **Voltage Controlled Temperature Compensated Crystal Oscillator**
- **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)** 

XVT9002-1

**26 MHz
VCTCXO**



SM3225-4 Case

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Frequency	Fo			26.000000		MHz
Storage Temperature in Tape and Reel			-40		+85	°C
Operating Temperature Range			-30		+75	°C
Power Supply Voltage	Vcc		2.3	2.4	2.5	V
Output Voltage with Load 10 pF 10KΩ	Vout		0.8	1.1		V _{P-P}
Output Waveform			clipped sinewave			
Power Supply Current	Icc			0.9	1.2	mA
Control Voltage	Vcon		0.2	1.0	2.2	V
Control Voltage Input Impedance			100K			ohms
Frequency Tolerance, Vcon = 1.2 V, after Two Reflows			±2.5 ppm max @ 25 °C ±3 °C			
Frequency Stability versus:						
Temperature, -30 to 75 °C			-2.5		2.5	ppm
Supply Voltage, 2.3 to 2.5 V			-0.3		0.3	ppm
Load 10 pF 10 KΩ ±10%			-0.2		0.2	ppm
Control Voltage Frequency Range, 1.2 ±1.0 V			±9	±12	±15	ppm
Start Up Time, 90% of final RF level in V _{P-P}				0.5	2.0	ms
First Year Aging @ 25 °C				±1		ppm
Harmonics				-10	-5	dBc
SSB Phase Noise @ 1 kHz Carrier Offset				-132	-130	dBc/Hz
Standard Shipping Quantity on 180 mm (7") Reel				1000		units
Lid Symbolization	9002-1 // YWWS					



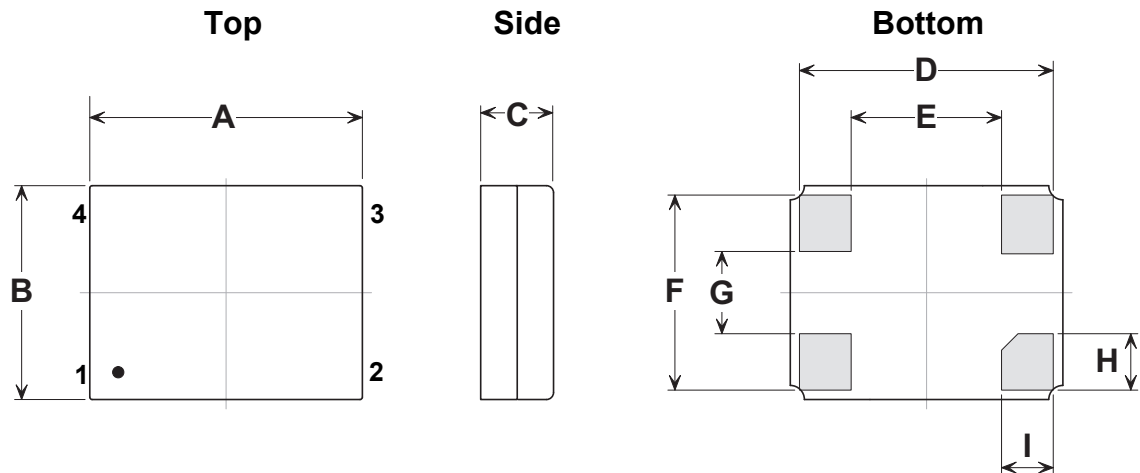
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

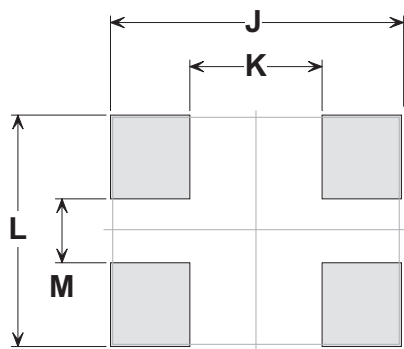
1. The design, manufacturing process, and specifications of this device are subject to change without notice.

SM3225-4 Style Case

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



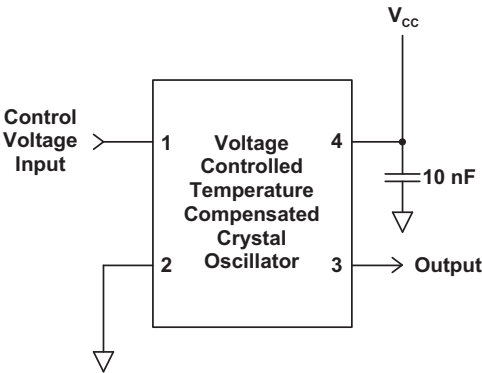
Typical PCB Land Pattern



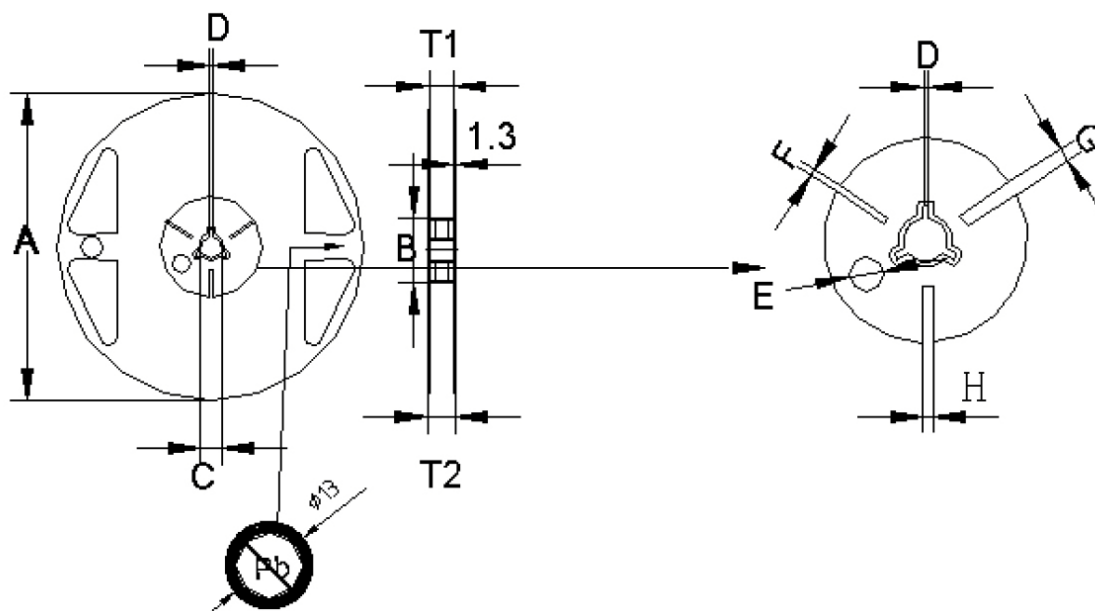
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.00	3.20	3.40	0.118	0.126	0.133
B	2.30	2.50	2.70	0.091	0.098	0.106
C	-	-	1.30	-	-	0.051
D	-	3.08	-	-	0.121	-
E	-	1.50	-	-	0.059	-
F	-	2.38	-	-	0.094	-
G	-	0.80	-	-	0.031	-
H	-	0.79	-	-	0.031	-
I	-	0.79	-	-	0.031	-
J	-	3.08	-	-	0.121	-
K	-	1.50	-	-	0.059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

Application Circuit

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

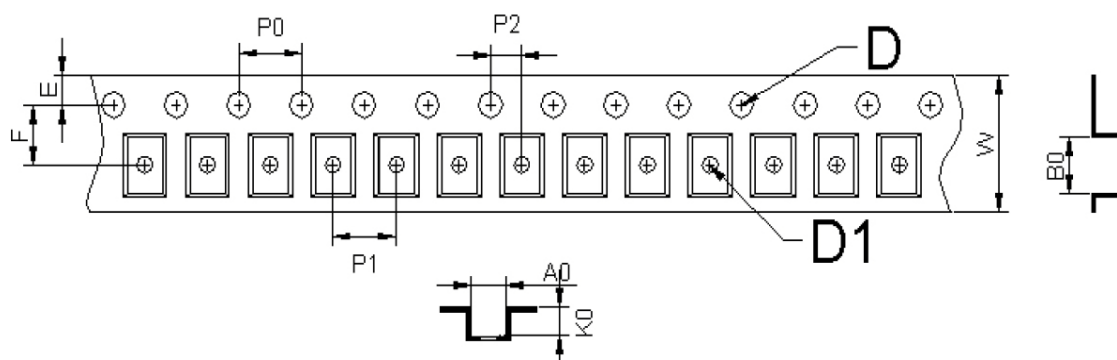


Reel Dimensions



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