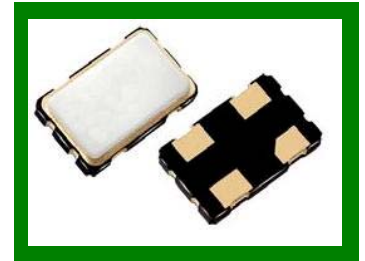


Temperature Compensated Voltage Controlled Crystal Oscillator

TCVCXO Package 3.2 x 2.5mm Surface Mount



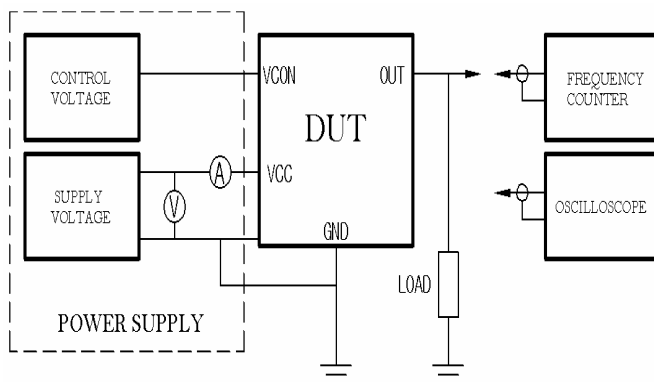
RoHS
Compliant



Electrical Specifications

Model		WSTX32	WSTV32		
Frequency Range		10.000 to 30.000		MHz	
Applications		TCXO	TCVCXO		
Supply Voltage		V _{dd} = 2.8V, 3.3V		V ±5%	
Load		10KΩ / 10pF		±10%	
Operating Temperature Range		-40 to +85		°C	
Frequency Stability	vs. Temp	±2.0 to ±5.0ppm		ppm/max Ref to 25°C ±2°C	
	vs. Volt	±0.3 / V _{cc} ±5%			
	vs. Load	±0.3 / Load ±10%			
	Aging	±1.0 (First Year)			
	Tolerance	±1.0 (25°C ±2°C)			
Output	Level	0.8		V _{p-p} / min	
	Wave Form	Clipped Sine wave			
Start-up Time		10(2 to 3ms Typ)		ms / max	
VT	Frequency Deviation	N.A.	±10	ppm / min	
	Control Voltage (V _{con})	N.A.	1.5 ±1.0	V	
Phase Noise (Typical)		100Hz	1KHz	10KHz	100KHz
		-110dBc/Hz	-130dBc/Hz	-140dBc/Hz	

Test Circuit



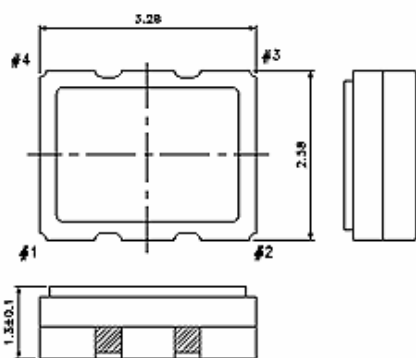
WSTX32 / WSTV32

Part Numbering System

Type	Voltage (V)		Frequency In MHz	Frequency Stability (ppm max)		Operating Temperature Range (°C)		Output Load (pF)		Frequency deviation		Tape & Reel
				10	±1.0	A	0 ~ 50	10	10KΩ/ 10pF	0	No Connect (TCXO)	
WSTX32	28	2.8	In MHz	15	±1.5	B	-10 ~ 60	15	15pF	5	± 5ppm min	TR
WSTV32	33	3.3		20	±2.0	C	-20 ~ 70			10	± 10ppm min	
				25	±2.5	D	-30 ~ 75					
				30	±3.0	E	-40 ~ 85					
				50	±5.0							

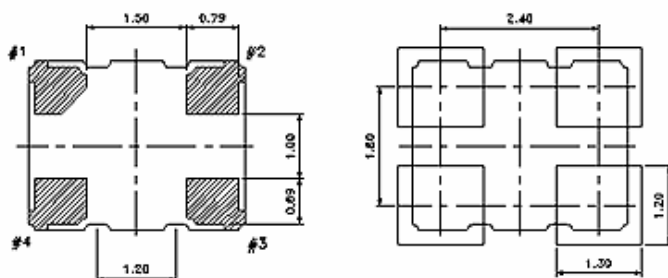
Examples : WSTX32-33-32.000-10-C-10-TR, WSTV32-28-30.000-25-E-15-10-TR

Mechanical Outline



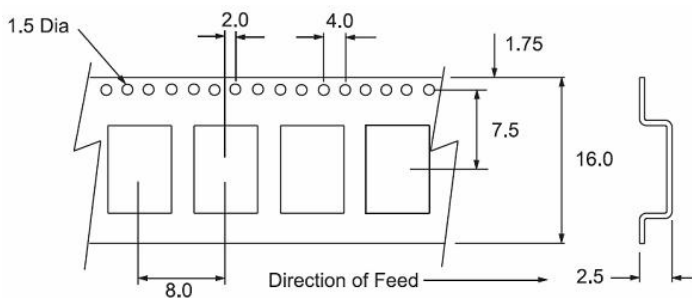
PIN CONNECTION	
1	NC
2	Case Ground
3	Output
4	VCC

Reference Land Pattern



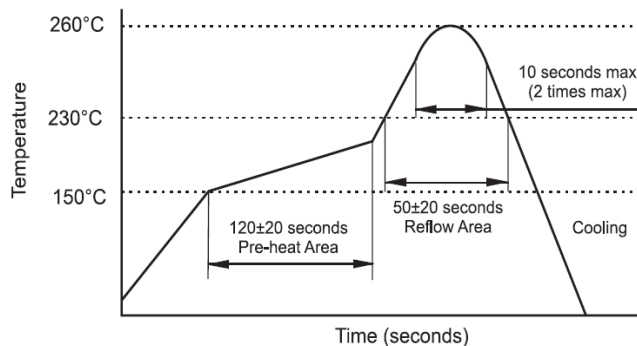
(Dimensions are millimeters)

Carrier Tape Dimensions



(Dimensions are millimeters)

Solder Reflow Characteristics



Notes:

- Product is shipped in Tape and Reel configuration. Each reel contains 1000 pieces.
- Specification subject to change without notice.