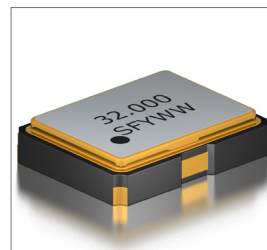


Features

- $\pm 0.5\text{ppm}$ (Frequency Stability) Available
- Clipped Sinewave
- (VC)TCXO
- Tape and Reel

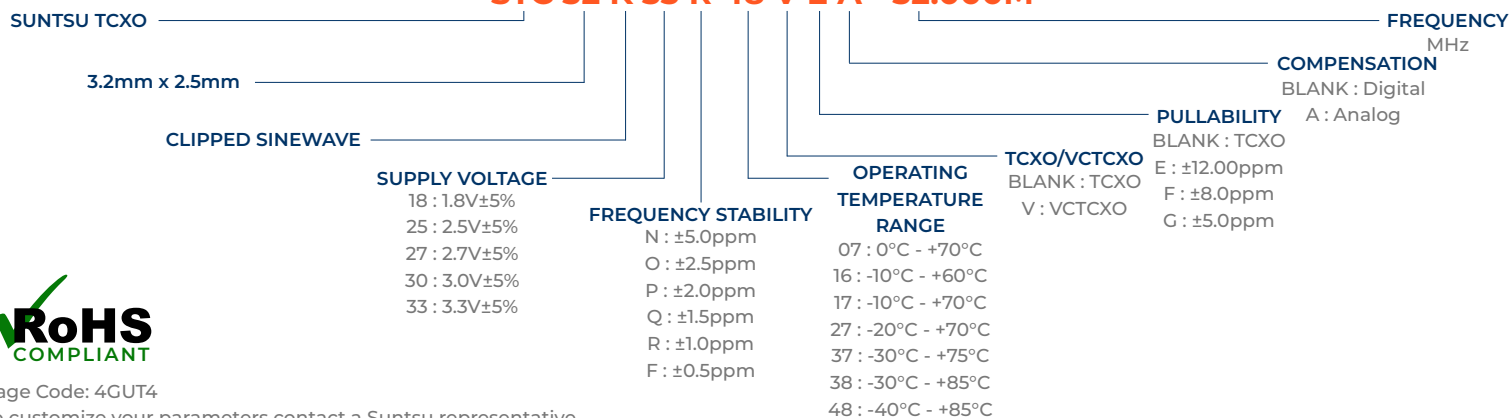
Applications

- GPS
- Mobile Communication Equipment
- Cellular And Cordless Phones
- IP Networking



Part Numbering Guide

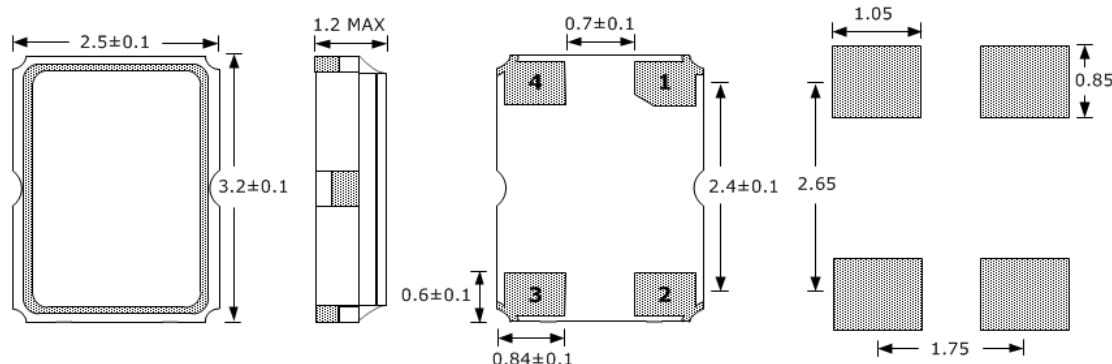
STC 32 K 33 R 48 V E A - 32.000M



Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	6		40	
Frequency Tolerance at +25°C	ppm	-1.5		+1.5	1 hour after reflow.
Freq. Stability vs. Op Temp.	ppm	-0.5		+0.5	See part numbering guide for options.
Freq. Stability vs. Supply Voltage	ppm	-0.3		+0.3	V _{DD} $\pm 5\%$ change.
Freq. Stability vs. Load	ppm	-0.2		+0.2	$\pm 10\%$ change
Freq. Stability vs. Aging	ppm	-1.0		+1.0	1 Year
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature	°C	-55		+125	
Supply Voltage (V _{DD})	V	3.135	3.3	3.465	See part numbering guide for options.
Current (I _{DD})	mA			2	
Control Current (VC, VCTCXO)	V	0		V _{DD}	Center Voltage : V _{DD} *50%
Pullability (VCTCXO)	ppm	± 5.0		± 12.0	See part numbering guide for options.
Linearity (VCTCXO)	%			10	
Output Load (Clipped Sinewave)	k Ω /pF			10//10	
Output Logic Levels	V _{P-P}	0.8			
Symmetry (Duty Cycle)	%	40	50	60	
Start-Up Time	ms			3	
VC Input Impedance (VCTCXO)	k Ω	100			
Phase Noise (Typical) 10Hz Offset	dBc/Hz		-85		
Phase Noise (Typical) 100Hz Offset	dBc/Hz		-115		
Phase Noise (Typical) 1KHz Offset	dBc/Hz		-135		
Phase Noise (Typical) 10KHz Offset	dBc/Hz		-145		
Phase Noise (Typical) 100KHz Offset	dBc/Hz		-150		

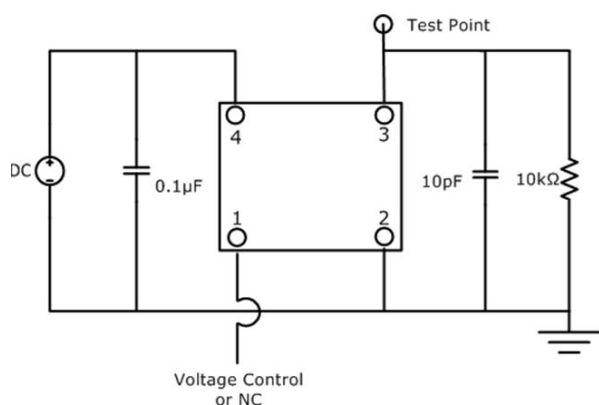
Outline Drawing

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

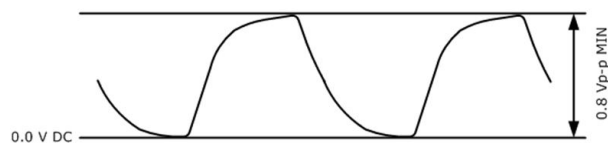


PIN	FUNCTION
1	V _C (VCTCXO) NC OR GND (TCXO)
2	GND
3	OUTPUT
4	V _{DD}

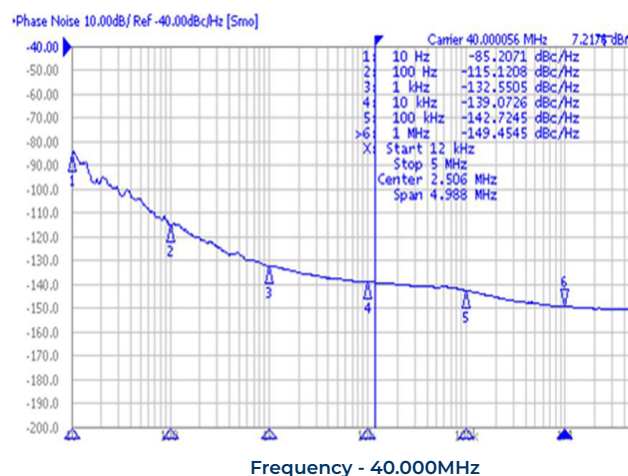
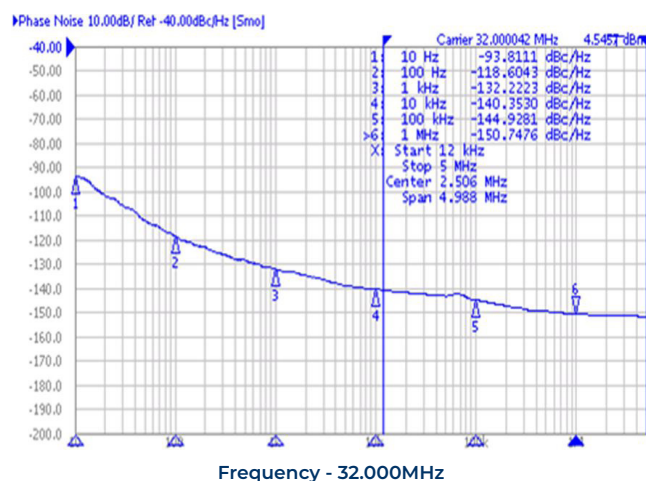
Test Circuit (Clipped Sinewave)



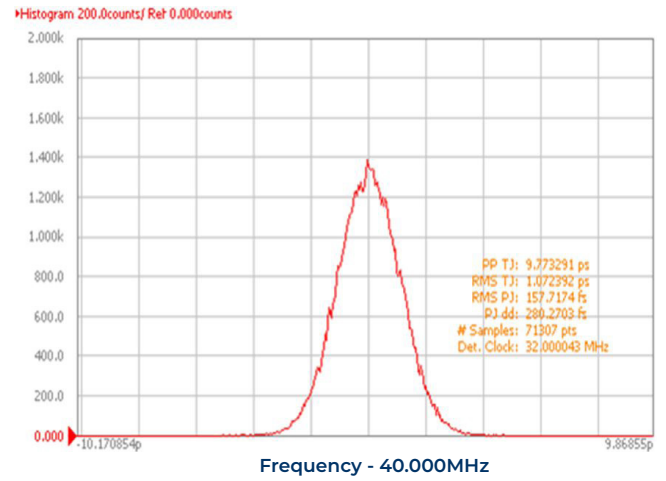
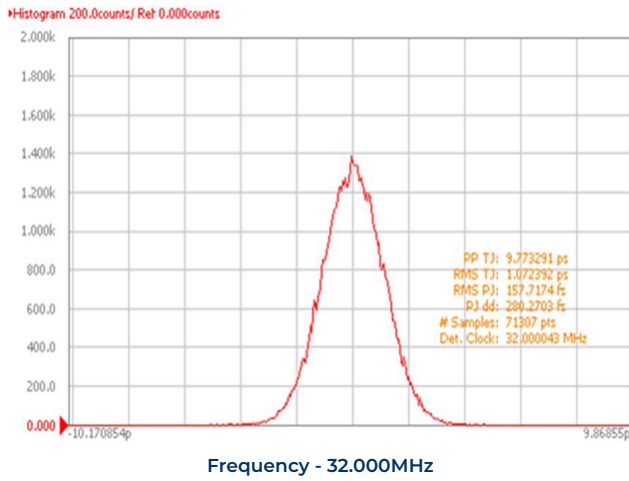
Waveform (Clipped Sinewave)



Typical Phase Noise (Measured By Agilent E5052A)



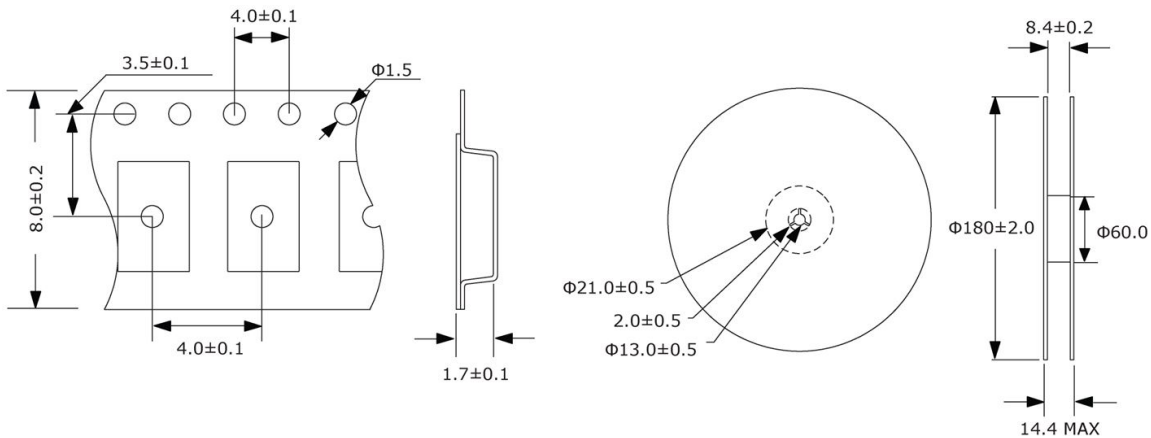
Jitter Performance (Measured By Agilent E5052A)



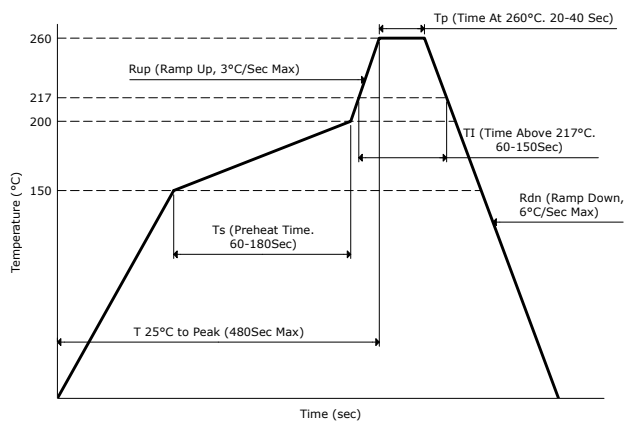
Tape And Reel Dimensions

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

3,000pcs/Reel



Reflow Profile & Part Marking



Frequency in MHz

Line 1: X X.X X X

Line 2: S F Y W W

Suntsu
Manufacturing
Identifier

Week
Year

Environmental Specifications		Mechanical Specifications	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A	Vibration	MIL-STD-883, Method 2007, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	Moisture Resistance	MIL-STD-883, Method 1004
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215
Moisture Sensitivity	J-STD-020, MSL 1	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K