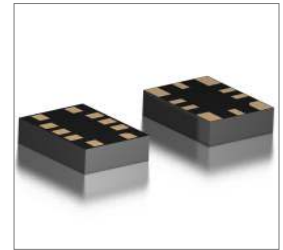
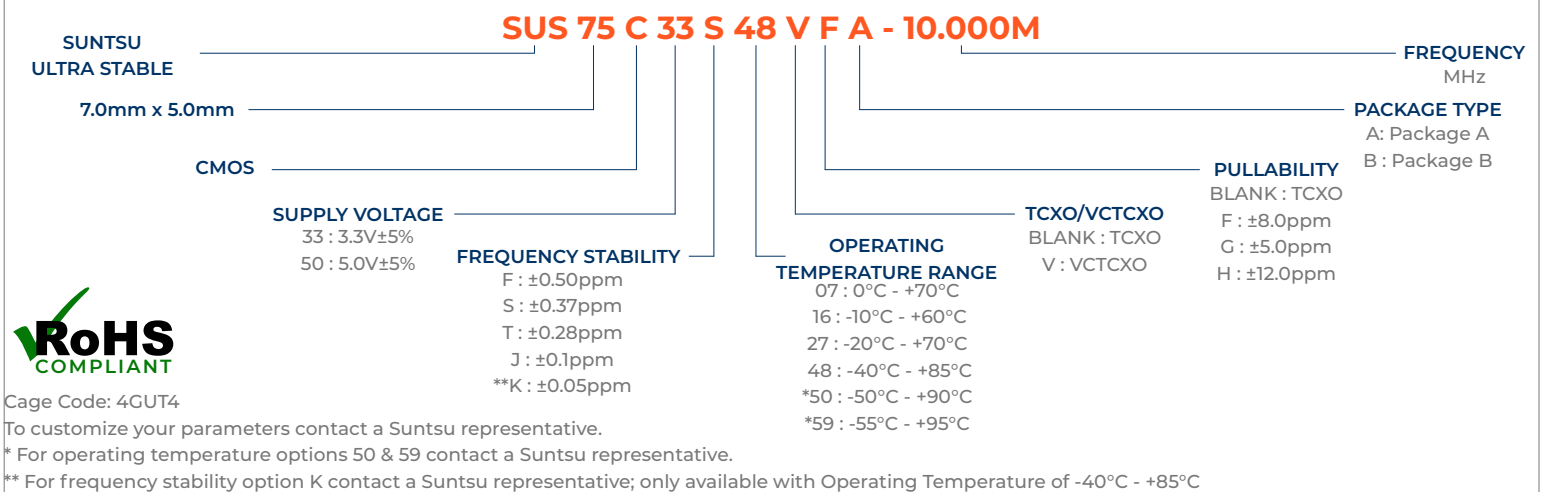


Features
• Stability ± 0.05 ppm Available
• CMOS
• (VC)TCXO
• Two Package Types
• Extended Temperature Range

Applications
• Base Stations
• Stratum 3
• Small Cell



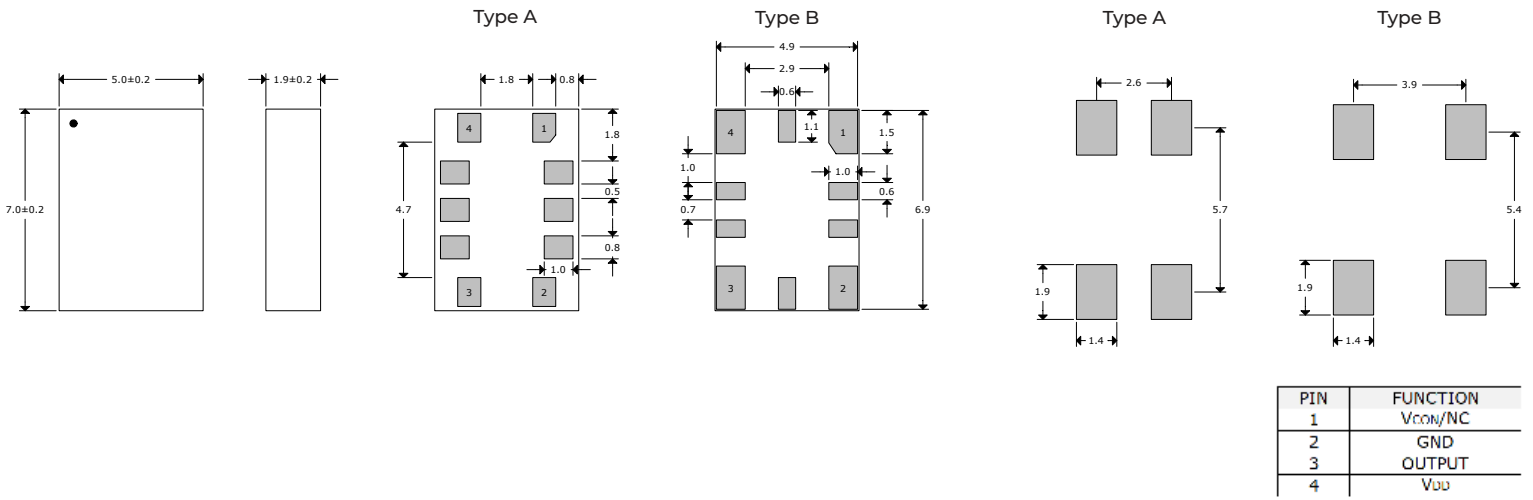
Part Numbering Guide



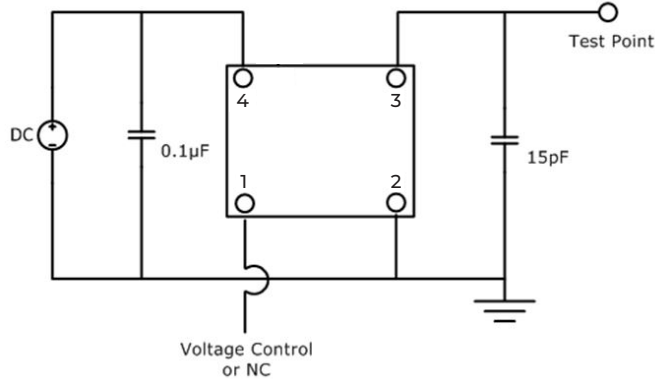
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	10		52	
Frequency Tolerance	ppm	-0.5		0.5	at 25°C
Freq Stability vs Op Temp (ref at 25°C)	ppm	± 0.05		± 0.5	See part numbering guide for options.
Supply Sensitivity	ppm			± 0.1	V _{DD} $\pm 5\%$
Load Sensitivity	ppm			± 0.2	Load $\pm 5\%$
Aging/First Year	ppm			± 1.0	Standard
Operating Temperature	°C	-55		95	See part numbering guide for options.
Storage Temperature	°C	-55		125	
Supply Voltage (V _{DD}) - 3.3V Option	V	3.135	3.3	3.465	
Supply Voltage (V _{DD}) - 5.0V Option	V	4.750	5.0	5.250	
Current (I _{DD})	mA			15	
Voltage (VC, VCTCXO) - 3.3V Option	V	0.5		2.5	
Voltage (VC, VCTCXO) - 5.0V Option	V	0.5		2.5	
Pullability (VCTCXO)	ppm	± 5.0		± 12.0	See part numbering guide for options.
Linearity (VCTCXO)	%			10	
Output Load (CMOS)	pF			15	
Output Logic HIGH Level (V _{OH})	V	2.4			
Output Logic LOW Level (V _{OL})	V			0.4	
Rise (T _R) And Fall (T _F) Time	ns			6	
Symmetry (Duty Cycle)	%	45	50	55	
Tuning Slope			Positive		
Start-Up Time	ms			10	
VC Input Impedance (VCTCXO)	k Ω	200			
Phase Noise (Typical) 10Hz Offset	dBc/Hz			-95	
Phase Noise (Typical) 100Hz Offset	dBc/Hz			-120	
Phase Noise (Typical) 1KHz Offset	dBc/Hz			-140	
Phase Noise (Typical) 10KHz Offset	dBc/Hz			-145	
Phase Noise (Typical) 100kHz Offset	dBc/Hz			-150	

Outline Drawing & Land Pattern

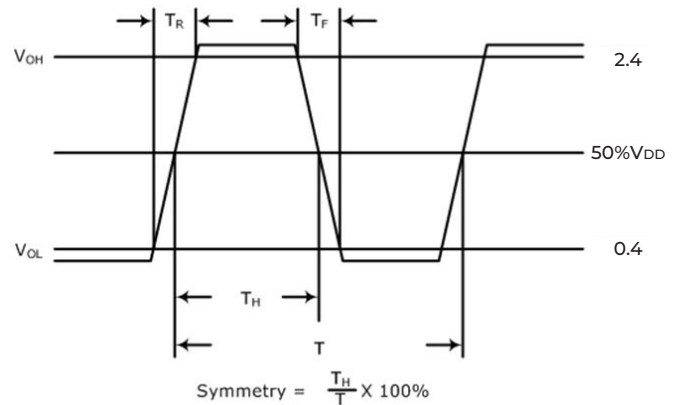
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



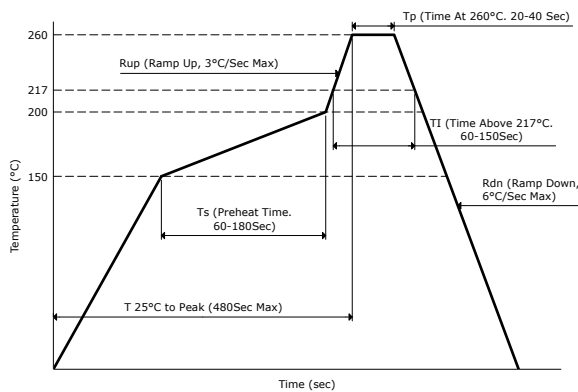
Test Circuit (CMOS)



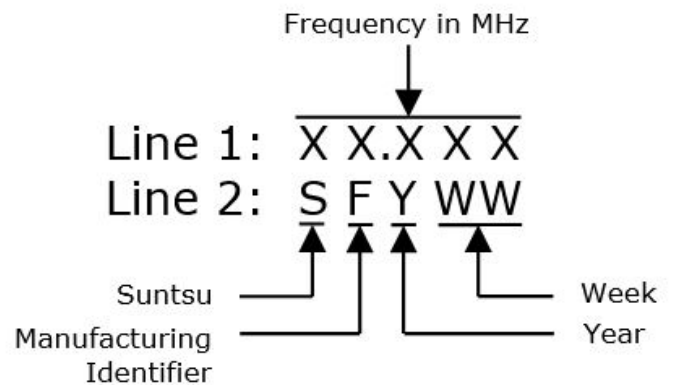
Waveform (CMOS)



Reflow Profile



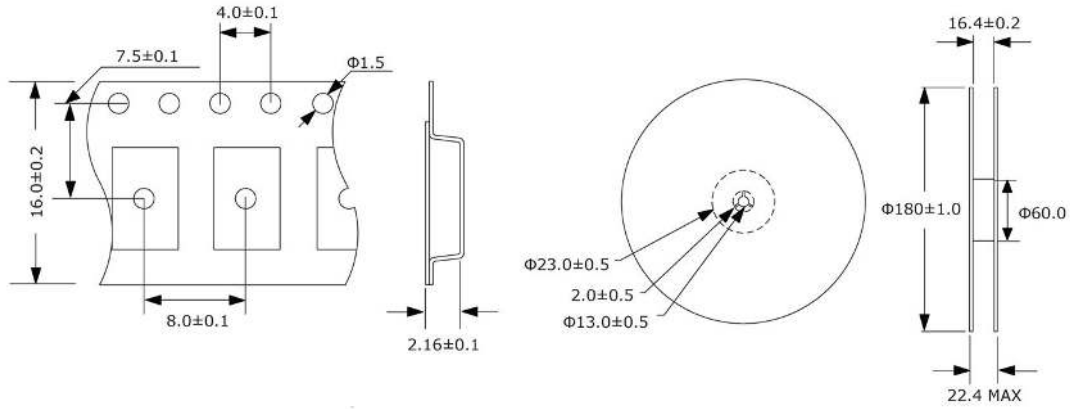
Part Marking



Tape And Reel Dimensions

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

1,000pcs/Reel



Reliability

Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC