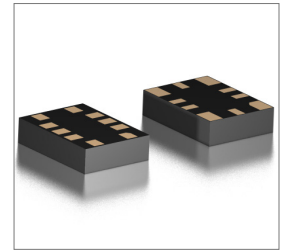
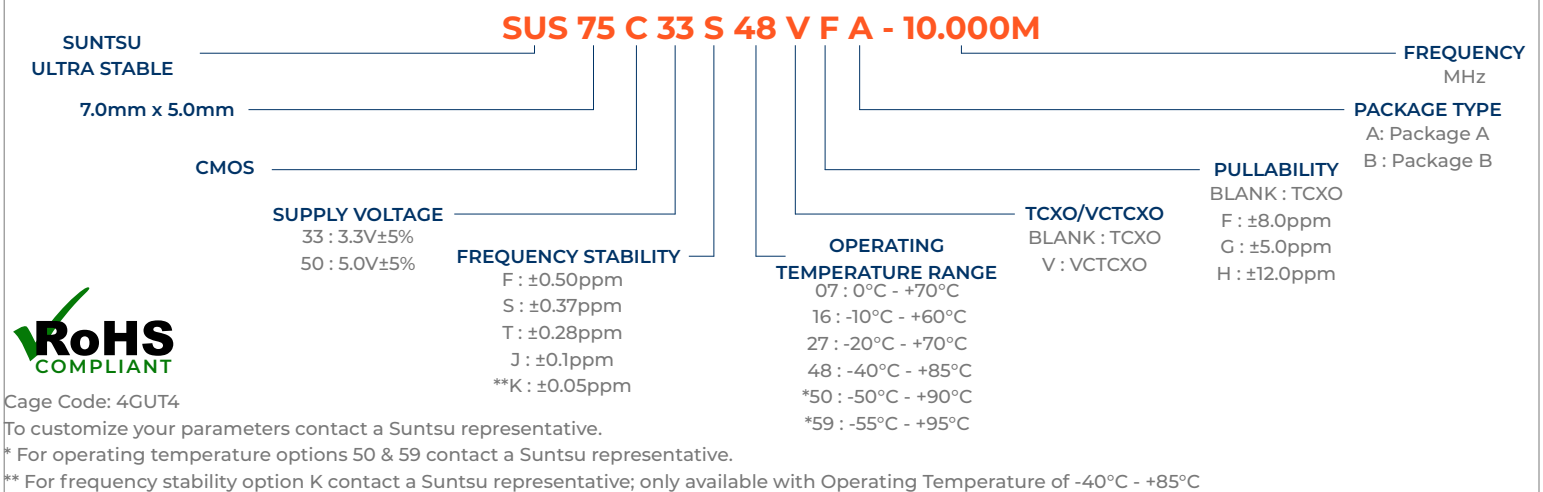


Features
• Stability $\pm 0.05$ ppm Available
• CMOS
• (VC)TCXO
• Two Package Types
• Extended Temperature Range

Applications
• Base Stations
• Stratum 3
• Small Cell



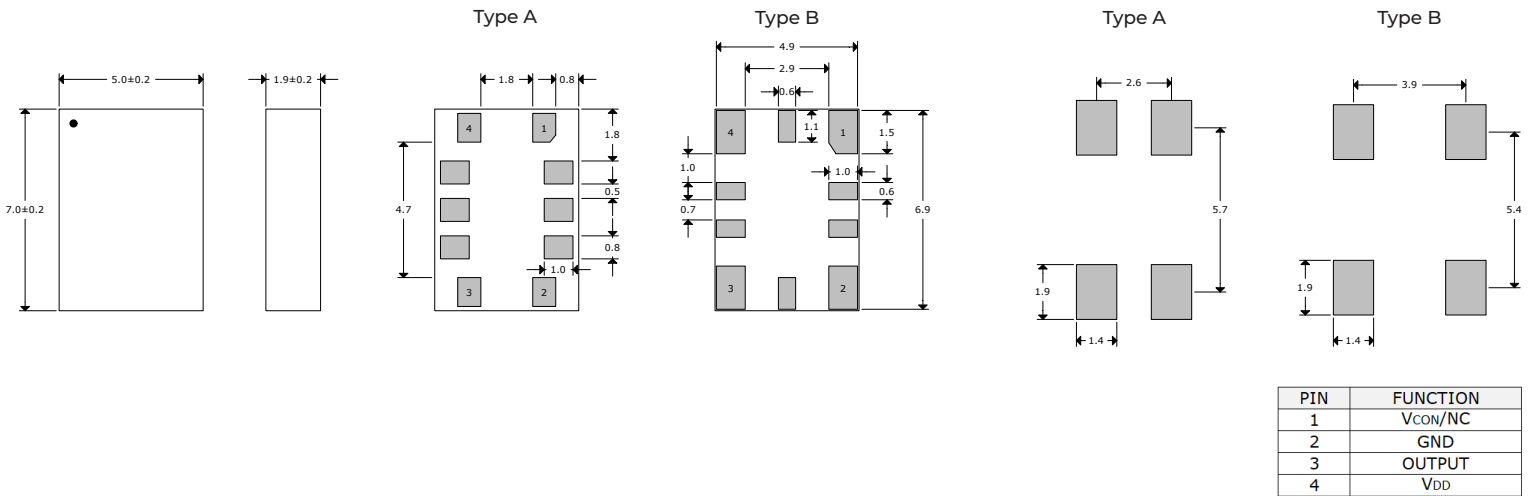
**Part Numbering Guide**



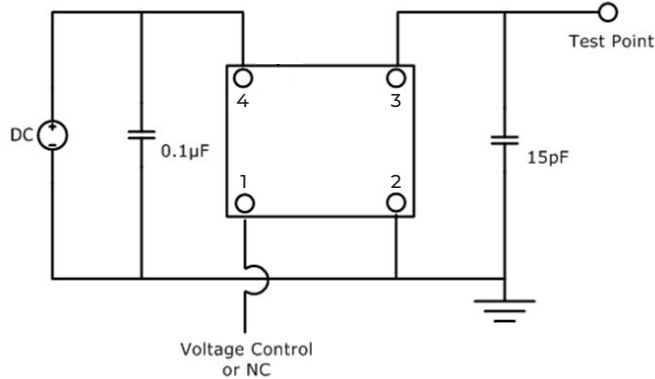
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	10		52	
Frequency Tolerance	ppm	-0.5		0.5	at 25°C
Freq Stability vs Op Temp (ref at 25°C)	ppm	$\pm 0.05$		$\pm 0.5$	See part numbering guide for options.
Supply Sensitivity	ppm			$\pm 0.1$	V <sub>DD</sub> $\pm 5\%$
Load Sensitivity	ppm			$\pm 0.2$	Load $\pm 5\%$
Aging/First Year	ppm			$\pm 1.0$	Standard
Operating Temperature	°C	-55		95	See part numbering guide for options.
Storage Temperature	°C	-55		125	
Supply Voltage (V <sub>DD</sub> ) - 3.3V Option	V	3.135	3.3	3.465	
Supply Voltage (V <sub>DD</sub> ) - 5.0V Option	V	4.750	5.0	5.250	
Current (I <sub>DD</sub> )	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	$\pm 5.0$		$\pm 12.0$	See part numbering guide for options.
Linearity (VCTCXO)	%			10	
Output Load (CMOS)	pF			15	
Output Logic HIGH Level (VoH)	V	2.4			
Output Logic LOW Level (VoL)	V			0.4	
Rise (Tr) And Fall (Tf) Time	ns			6	
Symmetry (Duty Cycle)	%	45	50	55	
Tuning Slope			Positive		
Start-Up Time	ms			10	
VC Input Impedance (VCTCXO)	k $\Omega$	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**

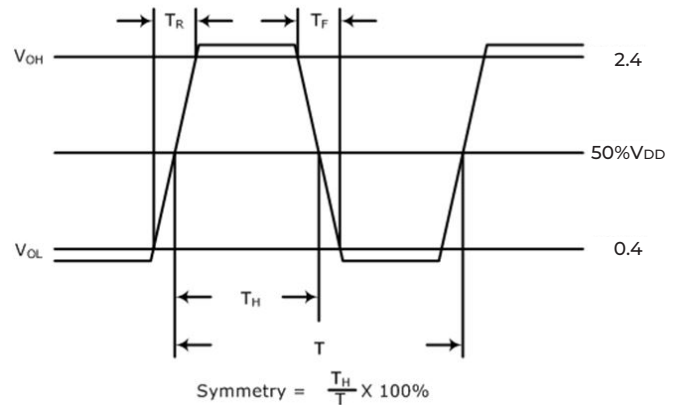
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



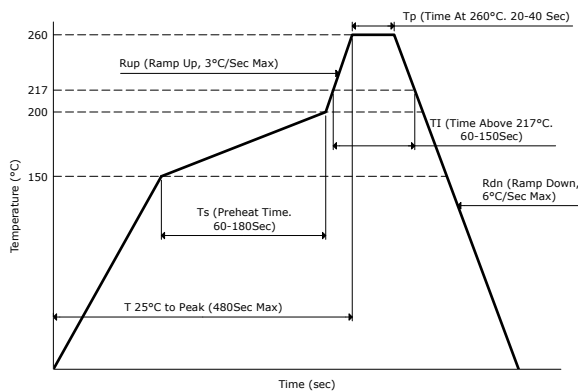
**Test Circuit (CMOS)**



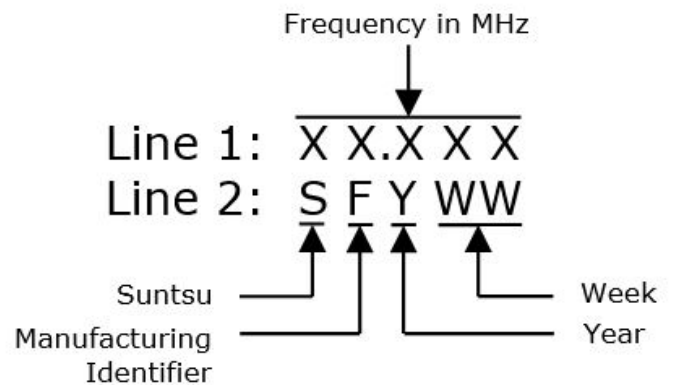
**Waveform (CMOS)**



**Reflow Profile**



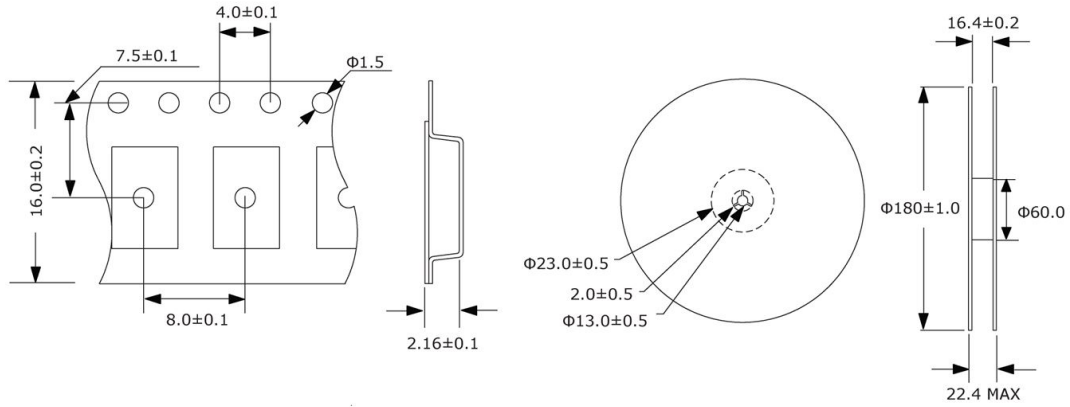
**Part Marking**



**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