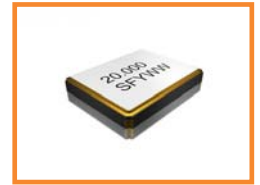


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - $\pm 10\text{ppm}/\pm 10\text{ppm}$ (Tolerance/Stability) Available - Ultra-Miniature Package - AT-Cut Fundamental - RoHS Compliant - Tape and Reel 	<ul style="list-style-type: none"> - Bluetooth - PCMCIA - Wireless Applications - Computers and Modems - High Density Applications



PART NUMBERING GUIDE	
<p>SUNTSU CRYSTAL → SXT 22 4 18 A A 48 - 20.000M ← FREQUENCY (MHz)</p> <p>2.5mm x 2.0mm</p> <p>4 PAD</p> <p>LOAD CAPACITANCE S: SERIES 8 - 20: 8pF - 20pF</p> <p>FREQUENCY TOLERANCE A: $\pm 50\text{ppm}$ B: $\pm 30\text{ppm}$ C: $\pm 25\text{ppm}$ D: $\pm 20\text{ppm}$ E: $\pm 15\text{ppm}$ F: $\pm 10\text{ppm}$</p> <p>Cage Code: 4GUT4 To customize your parameters contact a Suntsu representative. * For frequency stability option F contact a Suntsu representative. ** For operating temperatures up to $-55\sim 125^\circ\text{C}$ contact a Suntsu representative.</p>	<p>OPERATING TEMPERATURE RANGE** 07: 0°C to $+70^\circ\text{C}$ 16: -10°C to $+60^\circ\text{C}$ 17: -10°C to $+70^\circ\text{C}$ 27: -20°C to $+70^\circ\text{C}$ 38: -30°C to $+85^\circ\text{C}$ 48: -40°C to $+85^\circ\text{C}$</p> <p>FREQUENCY STABILITY A: $\pm 50\text{ppm}$ B: $\pm 30\text{ppm}$ C: $\pm 25\text{ppm}$ D: $\pm 20\text{ppm}$ E: $\pm 15\text{ppm}$ F: $\pm 10\text{ppm}$*</p>

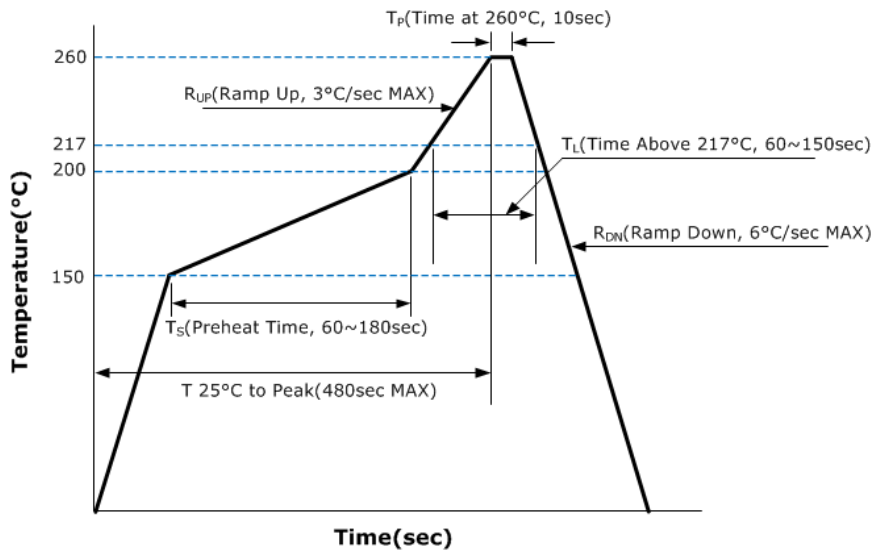
ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	12		66	AT-Cut Fundamental.
Frequency Tolerance at $+25^\circ\text{C}$		ppm	-10		+10	See part numbering guide for options.
Frequency Stability vs. Operating Temperature (Ref. 25°C)		ppm	-10		+10	See part numbering guide for options. First year @ $+25^\circ\text{C}$.
vs. Aging			-2		2	
Operating Temperature		$^\circ\text{C}$	-40		+85	See part numbering guide for options.
Storage Temperature		$^\circ\text{C}$	-40		+125	
Load Capacitance		pF	8		20	See part numbering guide for options.
Shunt Capacitance		pF			5	
Drive Level		μW		50	100	
Insulation Resistance		M Ω	500			@ $100\text{V}_{\text{DC}} \pm 15\text{V}$.
Equivalent Series Resistance	12.000MHz ~ 15.999MHz	Ω			120	AT-Cut Fundamental.
	16.000MHz ~ 19.999MHz				100	AT-Cut Fundamental.
	20.000MHz ~ 29.999MHz				80	AT-Cut Fundamental.
	30.000MHz ~ 39.999MHz				60	AT-Cut Fundamental.
	40.000MHz ~ 66.000MHz				50	AT-Cut Fundamental.

OUTLINE DRAWING		
	<p>ELECTRODE ARRANGEMENT (BOTTOM VIEW)</p>	<p>RECOMMENDED LAND PATTERN</p>
NOTE: Dimensions in millimeters (mm).		

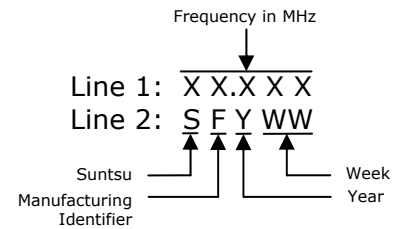
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003

REFLOW PROFILE

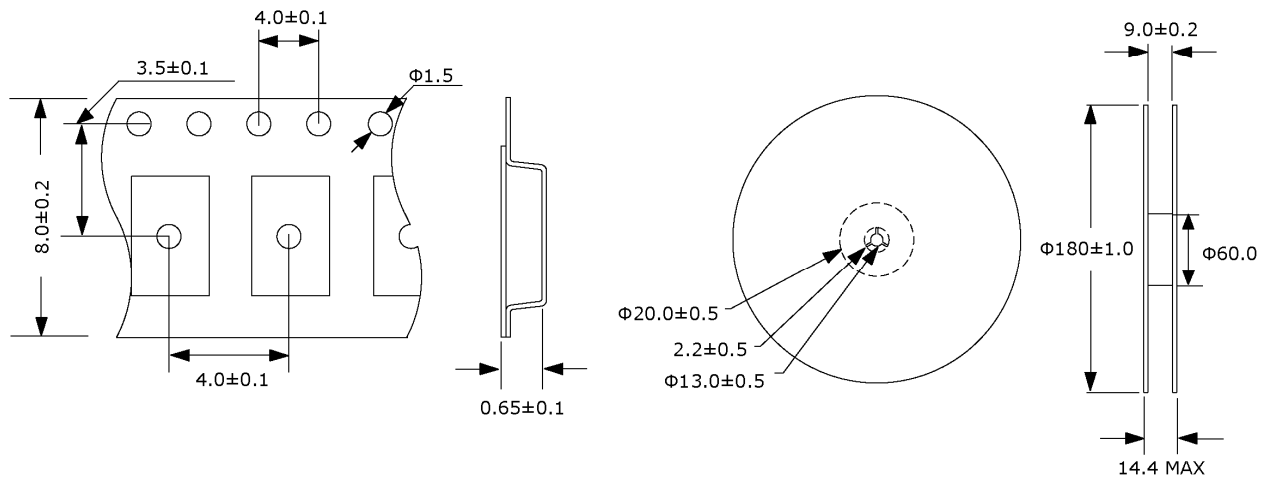


MARKING



TAPE AND REEL DIMENSIONS

3,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.