

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- <math>\pm 10\text{ppm}/\pm 10\text{ppm}</math> (Tolerance/Stability) Available</li> <li>- Miniature Package</li> <li>- AT-Cut Fundamental</li> <li>- RoHS Compliant</li> <li>- Tape and Reel</li> </ul>	<ul style="list-style-type: none"> <li>- Microprocessors</li> <li>- PCMCIA</li> <li>- Communication</li> <li>- Test Equipment</li> </ul>



**PART NUMBERING GUIDE**

SUNTSU CRYSTAL → **SXT 63 4 18 A A 48 T - 14.318M** ← FREQUENCY (MHz)

6.0mm x 3.5mm

4 PAD

LOAD CAPACITANCE  
S: SERIES  
7 - 30: 7pF - 30pF

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:  $\pm 10\text{ppm}$

MODE OF OPERATION  
BLANK: FUNDAMENTAL  
T: THIRD OVERTONE

OPERATING TEMPERATURE RANGE\*\*  
07: 0°C to +70°C  
16: -10°C to +60°C  
17: -10°C to +70°C  
27: -20°C to +70°C  
38: -30°C to +85°C  
48: -40°C to +85°C

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:  $\pm 10\text{ppm}$ \*

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 -55~125°C contact a Suntsu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	8		54	AT-Cut Fundamental.
		40		80	3 <sup>rd</sup> Overtone.
Frequency Tolerance at +25°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.
vs. Aging		-3		+3	First year @ +25°C.
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature	°C	-40		+125	
Load Capacitance	pF	7		30	See part numbering guide for options.
Shunt Capacitance	pF			7	
Drive Level	μW		100	300	
Insulation Resistance	MΩ	500			@ 100V <sub>DC</sub> ± 15V.
Equivalent Series Resistance	7.0000MHz ~ 11.999MHz			100	AT-Cut Fundamental.
	12.000MHz ~ 14.999MHz			60	AT-Cut Fundamental.
	15.000MHz ~ 29.999MHz			50	AT-Cut Fundamental.
	30.000MHz ~ 54.000MHz			40	AT-Cut Fundamental.
	40.000MHz ~ 80.000MHz			80	3 <sup>rd</sup> Overtone.

**OUTLINE DRAWING**

3.5±0.2

6.0±0.2

1.1 MAX

ELECTRODE ARRANGEMENT (BOTTOM VIEW)

1.5±0.1

3.2±0.1

1.3±0.1

0.9±0.1

RECOMMENDED LAND PATTERN

1.4

1.8

4.4

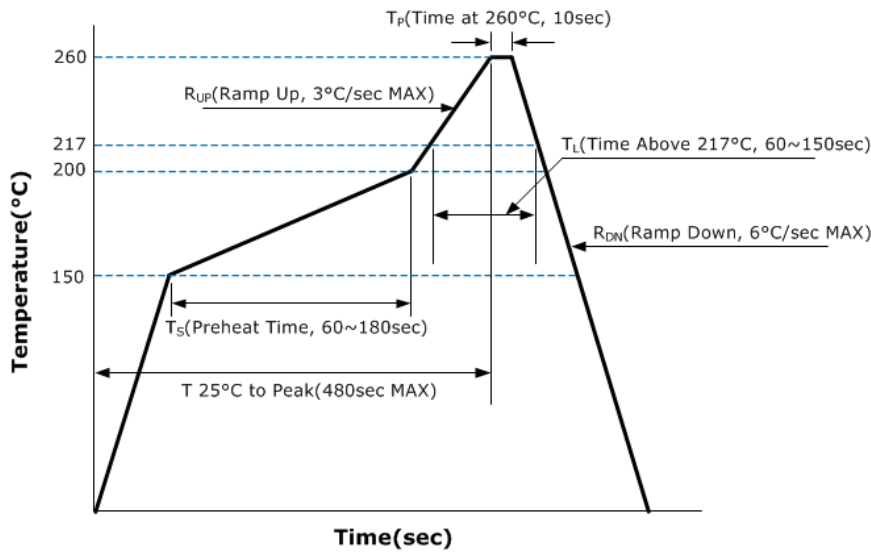
2.4

NOTE: Dimensions in millimeters (mm).

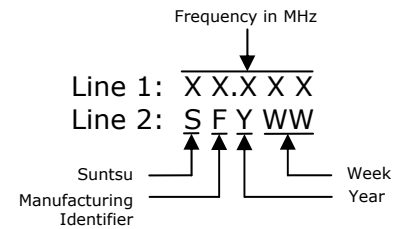
### ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

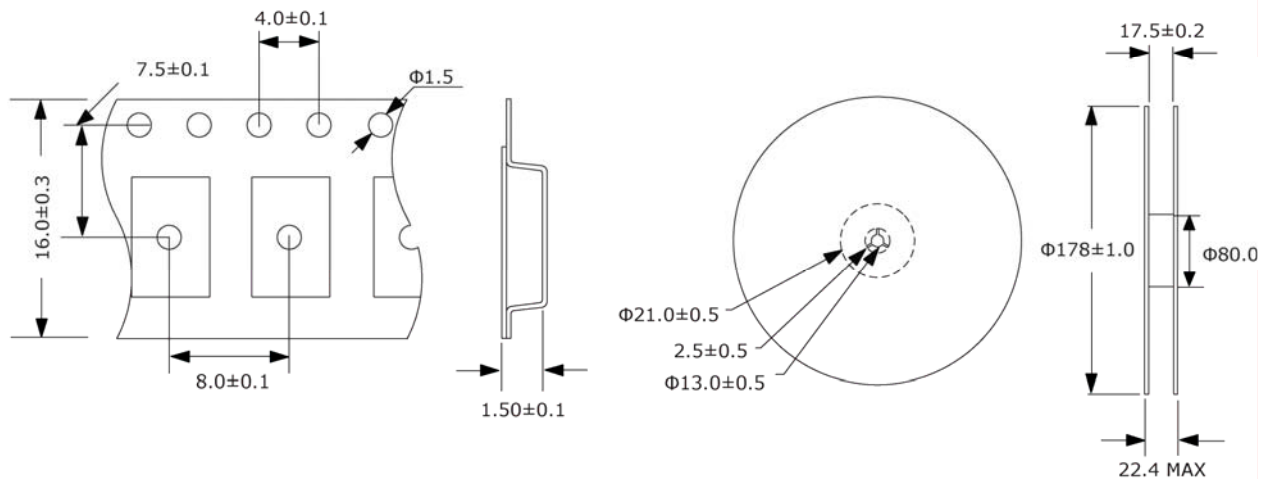


### MARKING



### TAPE AND REEL DIMENSIONS

1,000pcs/reel



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