

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"> - Communication and Test Equipment - PCMCIA - Wireless Applications - High Density Applications



PART NUMBERING GUIDE

SUNTSU CRYSTAL → **SXT 53 2 18 A A 48 - 27.000M** ← FREQUENCY (MHz)

5.0mm x 3.2mm

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

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

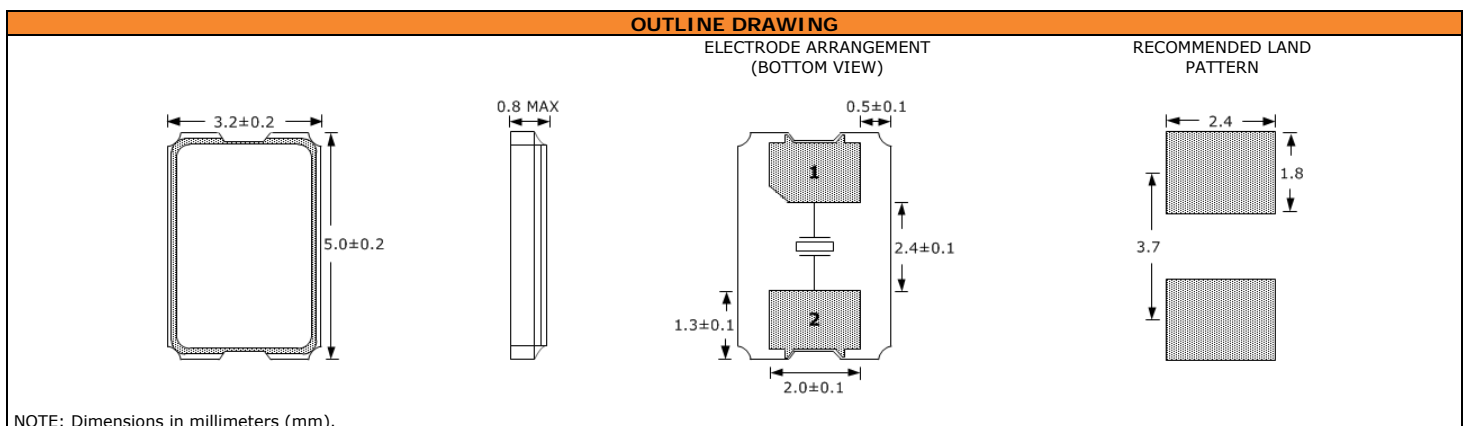
Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.
* For frequency stability option F contact a Suntsu representative.
** For operating temperatures up to -55~125°C contact a Suntsu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	8		54	AT-Cut Fundamental.
		40		100	3 rd 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		10	100	
Insulation Resistance	MΩ	500			@ 100V _{DC} ± 15V.
Equivalent Series Resistance	8.000MHz ~ 11.999MHz			100	AT-Cut Fundamental.
	12.000MHz ~ 19.999MHz			80	AT-Cut Fundamental.
	20.000MHz ~ 29.999MHz			70	AT-Cut Fundamental.
	30.000MHz ~ 54.000MHz			50	AT-Cut Fundamental.
	40.000MHz ~ 100.000MHz			70	3 rd Overtone.

OUTLINE DRAWING

ELECTRODE ARRANGEMENT (BOTTOM VIEW)

RECOMMENDED LAND PATTERN

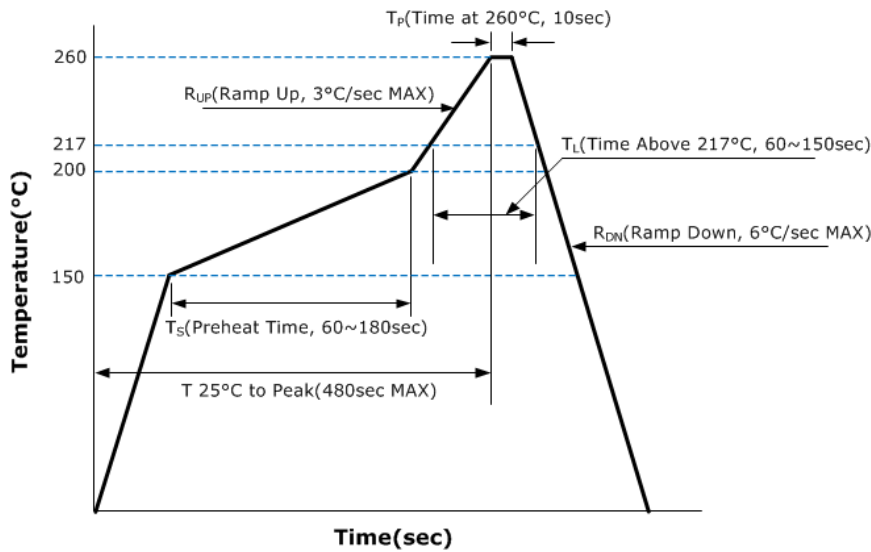


NOTE: Dimensions in millimeters (mm).

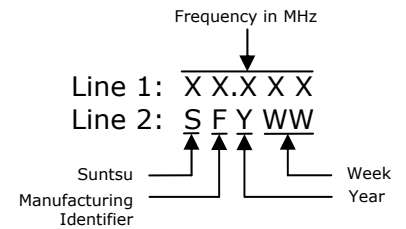
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

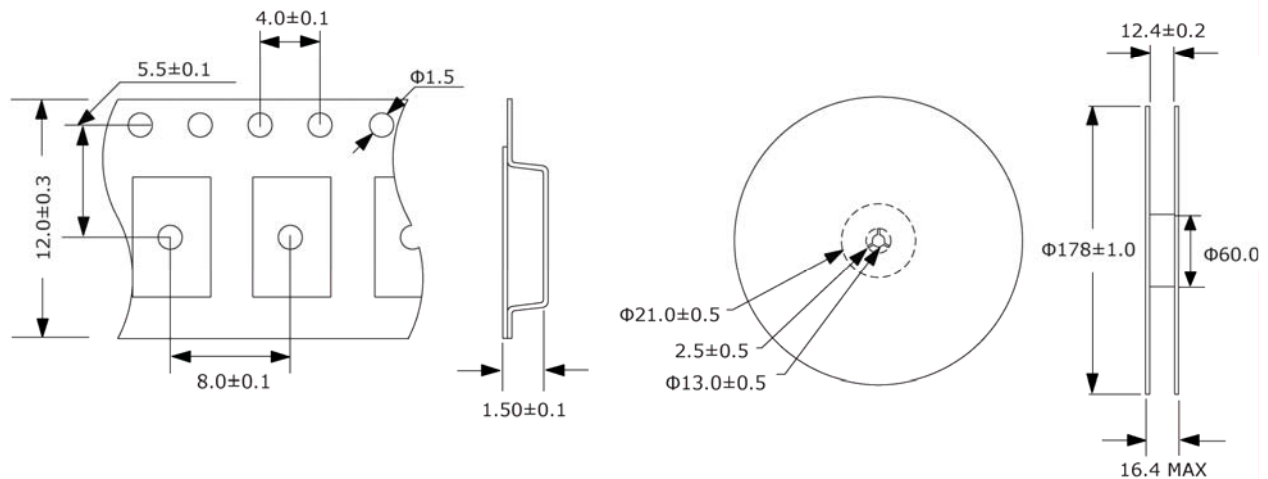


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



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