

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> ±10ppm/±10ppm (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 T - 27.000M** ← **FREQUENCY (MHz)**

5.0mm x 3.2mm

2 PAD

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

FREQUENCY TOLERANCE
A: ±50ppm
B: ±30ppm
C: ±25ppm
D: ±20ppm
E: ±15ppm
F: ±10ppm

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: ±50ppm
B: ±30ppm
C: ±25ppm
D: ±20ppm
E: ±15ppm
F: ±10ppm*

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)

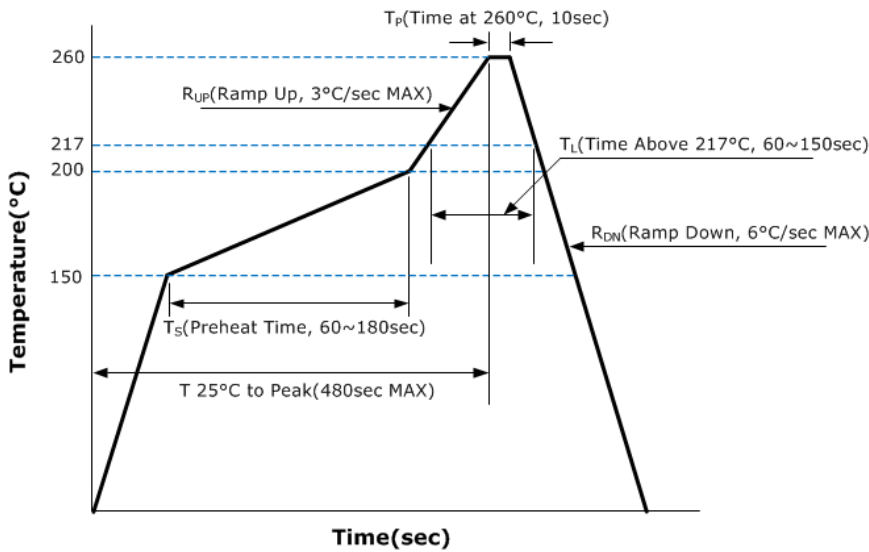
RECOMMENDED LAND PATTERN

NOTE: Dimensions in millimeters (mm).

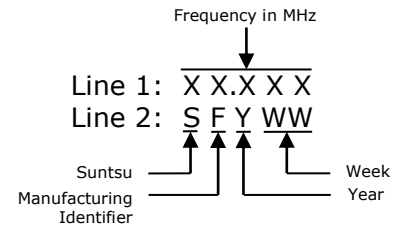
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

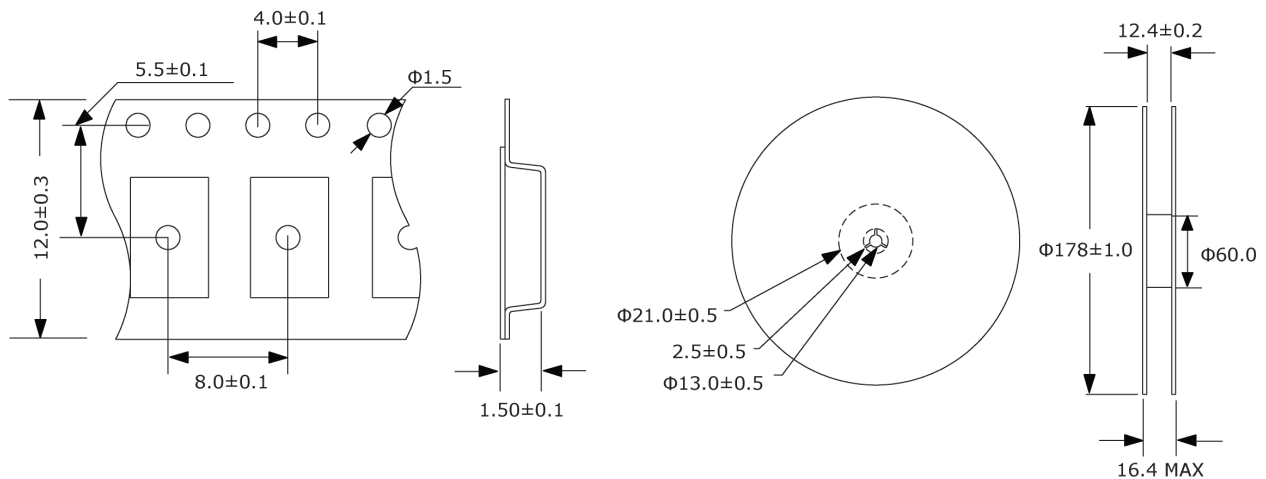


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



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