

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



PART NUMBERING GUIDE

SUNTSU CRYSTAL → **SXT 63 2 18 A A 48 T - 20.000M** ← FREQUENCY (MHz)

6.0mm x 3.5mm

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: $\pm 10\text{ppm}$

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.

MODE OF OPERATION
BLANK: FUNDAMENTAL
T: THIRD OVERTONE

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 $+85^\circ\text{C}$

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

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	7		54	AT-Cut Fundamental.
		40		100	3 rd Overtone.
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.
vs. Aging		-3		+3	First year @ $+25^\circ\text{C}$.
Operating Temperature	$^\circ\text{C}$	-40		+85	See part numbering guide for options.
Storage Temperature	$^\circ\text{C}$	-40		+125	
Load Capacitance	pF	7		30	See part numbering guide for options.
Shunt Capacitance	pF			7	
Drive Level	μW		100	500	
Insulation Resistance	M Ω	500			@ $100\text{V}_{\text{DC}} \pm 15\text{V}$.
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 ~ 100.000MHz			50	3 rd Overtone.

OUTLINE DRAWING

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

