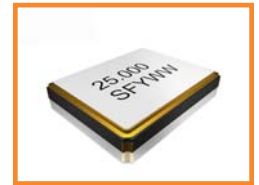


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - $\pm 10\text{ppm}/\pm 10\text{ppm}$ (Tolerance/Stability) Available - Ultra-Miniature Package - AT-Cut Fundamental - RoHS Compliant - Tape and Reel 	<ul style="list-style-type: none"> - Office Automation - Audio/Visual Bluetooth - Small Communication Devices - SSD - USB



PART NUMBERING GUIDE

SUNTSU CRYSTAL → **SXT 21 4 18 A A 48 - 25.000M** ← FREQUENCY (MHz)

2.0mm x 1.6mm

4 PAD

LOAD CAPACITANCE
S: SERIES
8 - 32: 8pF - 32pF

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	16		60	AT-Cut Fundamental.
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. First year @ +25°C.
vs. Aging			-2		+2	
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature		°C	-40		+125	
Load Capacitance		pF	8		16	See part numbering guide for options.
Shunt Capacitance		pF			5	
Drive Level		μW		50	100	
Insulation Resistance		M Ω	500			@ 100V _{DC} \pm 15V.
Equivalent Series Resistance	16.000MHz ~ 20.999MHz	Ω			200	AT-Cut Fundamental.
	21.000MHz ~ 25.999MHz				120	AT-Cut Fundamental.
	26.000MHz ~ 40.999MHz				100	AT-Cut Fundamental.
	41.000MHz ~ 60.000MHz				60	AT-Cut Fundamental.

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

