

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- <math>\pm 10\text{ppm}/\pm 10\text{ppm}</math> (Tolerance/Stability) Available</li> <li>- Ultra-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>- Bluetooth</li> <li>- Wireless LAN</li> <li>- High Density Applications</li> </ul>



**PART NUMBERING GUIDE**

SUNTSU CRYSTAL → **SXT 10 4 10 A A 48 - 40.000M** ← FREQUENCY (MHz)

1.2mm x 1.0mm

4 PAD

LOAD CAPACITANCE  
5 - 10: 5pF - 10pF

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.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	36		80	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	5		12	See part numbering guide for options.
Shunt Capacitance		pF			5	
Drive Level		μW		10	100	
Insulation Resistance		MΩ	500			@ 100V <sub>DC</sub> ± 15V.
Equivalent Series Resistance	36.000MHz ~ 39.999MHz	Ω			150	AT-Cut Fundamental.
	40.000MHz ~ 47.999MHz				80	AT-Cut Fundamental.
	48.000MHz ~ 80.000MHz				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

