

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - ±10ppm/±10ppm (Tolerance/Stability) Available - RoHS Compliant - RESISTANCE WELD - AT-Cut - Bulk Packing 	<ul style="list-style-type: none"> - Computer - Printer - CPU, Memory - Data Communication



PART NUMBERING GUIDE

SUNTSU CRYSTAL → **SXT HU 2 18 A A 48 T** - **10.000M** ← **FREQUENCY (MHz)**

HC-49/ U DIP → **SXT HU**

2 LEAD → **2**

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

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

FREQUENCY STABILITY
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

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	1.5		48	AT-Cut Fundamental.
		20		125	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		-5		+5	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		100	1000	
Insulation Resistance	MΩ	500			@ 100V _{DC} ± 15V.
Equivalent Series Resistance	1.500MHz ~ 1.999MHz			700	AT-Cut Fundamental.
	2.000MHz ~ 2.999MHz			500	AT-Cut Fundamental.
	3.000MHz ~ 3.499MHz			300	AT-Cut Fundamental.
	3.500MHz ~ 3.999MHz			150	AT-Cut Fundamental.
	4.000MHz ~ 5.999MHz			100	AT-Cut Fundamental.
	6.000MHz ~ 7.999MHz			50	AT-Cut Fundamental.
	8.000MHz ~ 12.999MHz			35	AT-Cut Fundamental.
	13.000MHz ~ 48.000MHz			25	AT-Cut Fundamental.
20.000MHz ~ 125.000MHz			60	3 rd Overtone.	

OUTLINE DRAWING	MARKING
	<p style="text-align: center;">Frequency in MHz</p> <p style="text-align: center;">Line 1: X X.X X X X</p> <p style="text-align: center;">Line 2: S F Y W W</p> <p style="text-align: center;">Suntsu Manufacturing Identifier Year Week</p>
NOTE: Dimensions in millimeters (mm).	

ENVIRONMENTAL SPECIFICATIONS		MECHANICAL SPECIFICATIONS	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition C
Fine Leak Test	MIL-STD-883, Method 1014, Condition A	Vibration	MIL-STD-883, Method 2007, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Moisture Resistance	MIL-STD-883, Method 1004	Resistance to Solvents	MIL-STD-202, Method 215
Moisture Sensitivity	J-STD-020, MSL 1	Solderability	MIL-STD-883, Method 2003