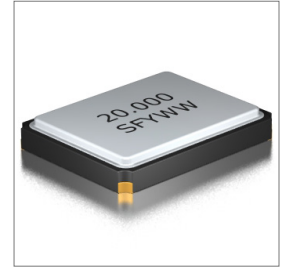


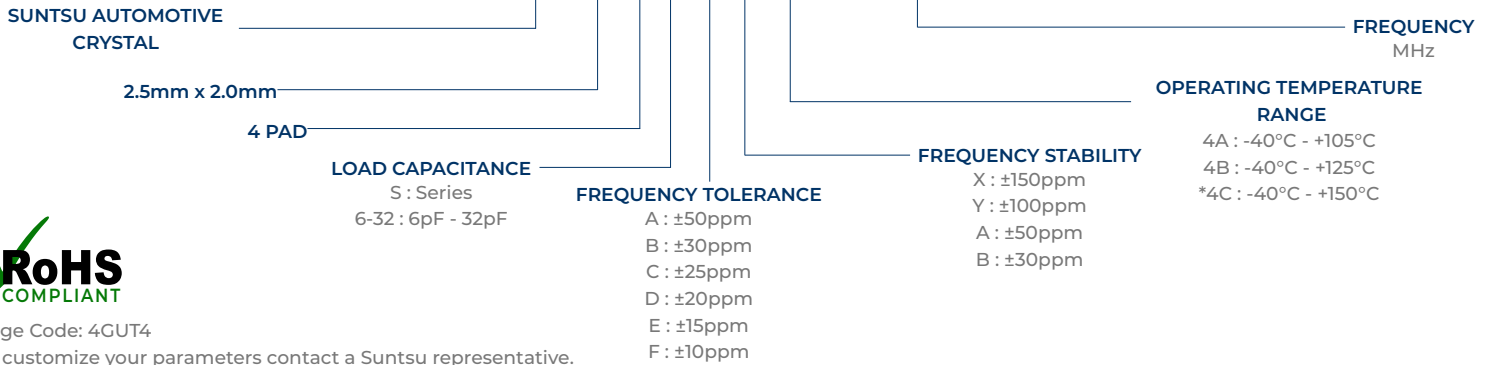
- ### Features
- $\pm 10\text{ppm}/\pm 30\text{ppm}$  (Tolerance/Stability) Available
  - Ultra-Miniature Package
  - High Reliability for Automotive
  - Wide Temperature Range Available
  - AEC-Q200 Compliant

- ### Applications
- Automotive Electronics
  - Infotainment System
  - ADAS
  - TPMS
  - Ethernet



## Part Numbering Guide

### SAX 22 4 18 A A 4A - 20.000M



Cage Code: 4GUT4

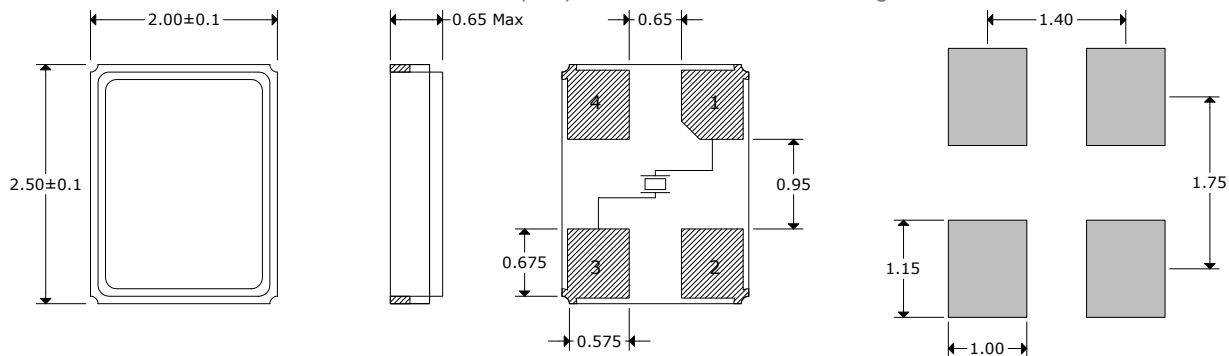
To customize your parameters contact a Suntsu representative.

\*For Operating Temperature Range 4C, contact a Suntsu representative

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	12		54	AT-Cut Fundamental.
Frequency Tolerance at +25°C	ppm	-10		10	See part numbering guide for options.
Frequency Stability vs. Op Temp	ppm	-30		30	See part numbering guide for options.
Frequency Stability vs. Aging	ppm	-3		3	First year @ +25°C.
Operating Temperature	°C	-40		150	See part numbering guide for options.
Storage Temperature	°C	-40		150	
Load Capacitance	pF	6		32	See part numbering guide for options.
Shunt Capacitance	pF			3	
Drive Level	$\mu\text{W}$		50	100	
Insulation Resistance	M $\Omega$	500			@ 100VDC $\pm 15\text{V}$ .
12.000MHz ~ 15.999MHz	$\Omega$			150	
ESR - 16.000MHz ~ 23.999MHz	$\Omega$			100	
24.000MHz ~ 31.999MHz	$\Omega$			80	
32.000MHz ~ 54.000MHz	$\Omega$			60	

### Outline Drawing & Recommended Landed Pattern

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



Environmental Specifications		Mechanical Specifications	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition B
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

