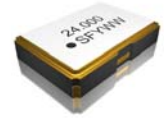


FEATURES

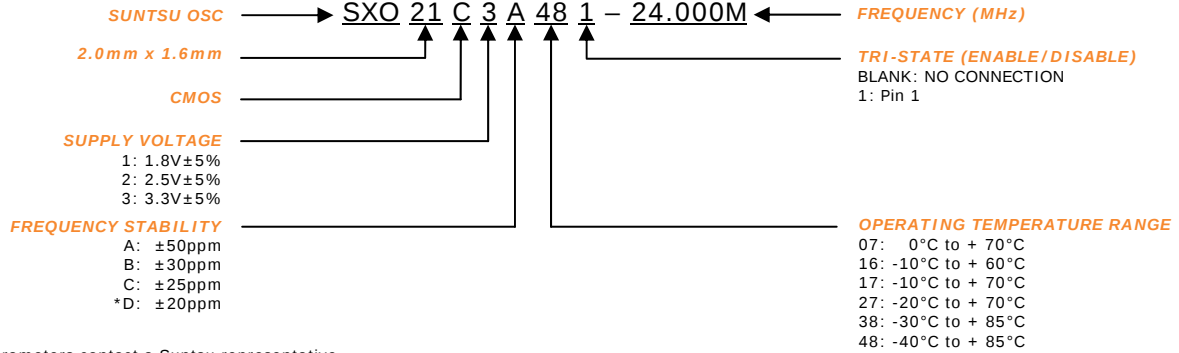
- ± 20 ppm (Frequency Stability) Available
- Ceramic Package
- CMOS
- RoHS Compliant
- Tape and Reel

APPLICATIONS

- Mobile Communication
- Portable Electronics
- PDA



PART NUMBERING GUIDE



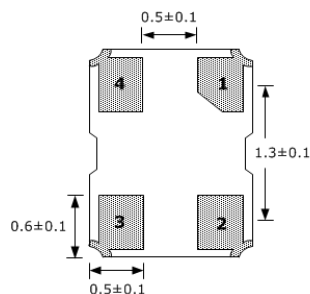
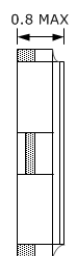
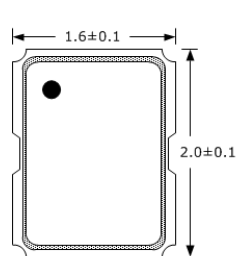
Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

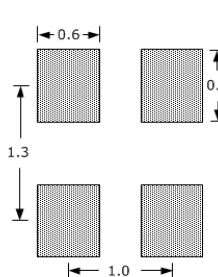
* For frequency stability option D contact a Suntsu representative.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	1		60	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)		ppm	-20		+20	See part numbering guide for options.
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature			-55		+125	
Supply Voltage (V_{DD})	1.8V Option	V	1.710	1.8	1.890	
	2.5V Option		2.375	2.5	2.625	
	3.3V Option		3.135	3.3	3.465	
Current (I_{DD})	1.8V Option	mA			10	
	2.5V Option				10	
	3.3V Option				15	
Output Load (CMOS)		pF			15	
Output Logic Levels	Output Logic High (V_{OH})	V	0.9 * V_{DD}			
	Output Logic Low (V_{OL})				0.1 * V_{DD}	
Rise (T_R) and Fall (T_F) Time		ns			10	
Symmetry (Duty Cycle)		%	45	50	55	
Tri-State Input Voltage	Enable	V	0.7 * V_{DD}			No Connection.
	Disable				0.3 * V_{DD}	
Start-Up Time		ms			10	
Phase Jitter (12kHz ~ 20MHz)		ps			1	

OUTLINE DRAWING



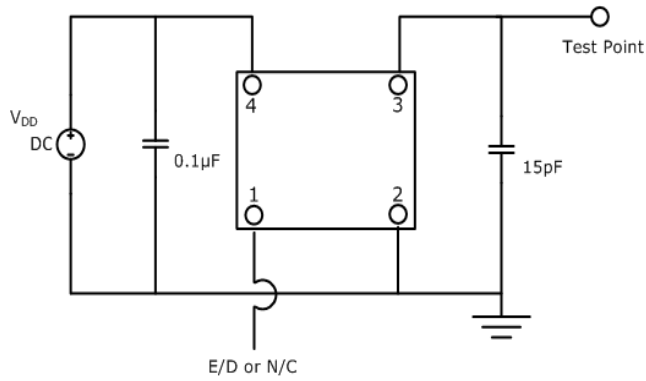
RECOMMENDED LAND PATTERN



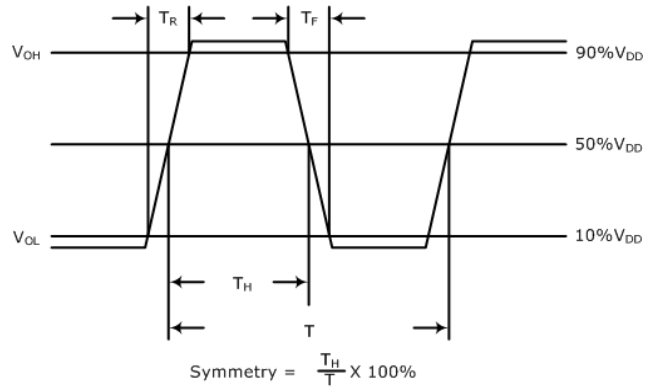
PIN	FUNCTION
1	TRI-STATE or NC
2	GND
3	OUTPUT
4	V_{DD}

NOTE: Dimensions in millimeters (mm).

TEST CIRCUIT (CMOS)

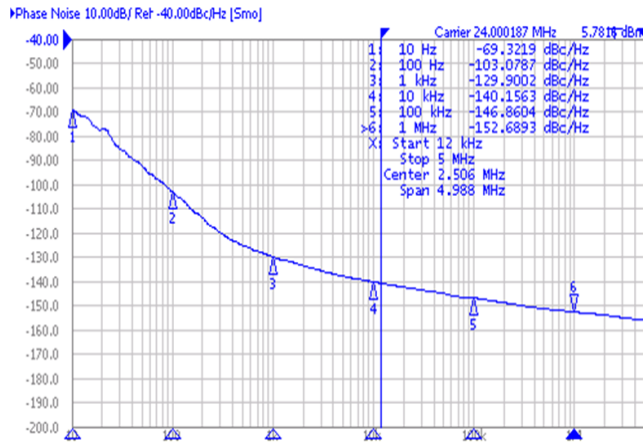


WAVEFORM (CMOS)

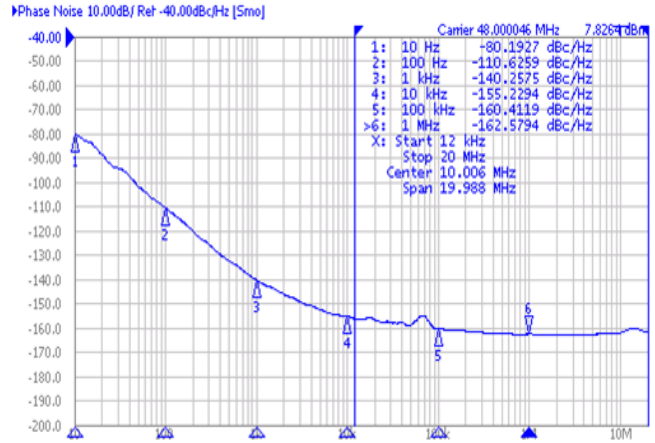


TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 24.000MHz

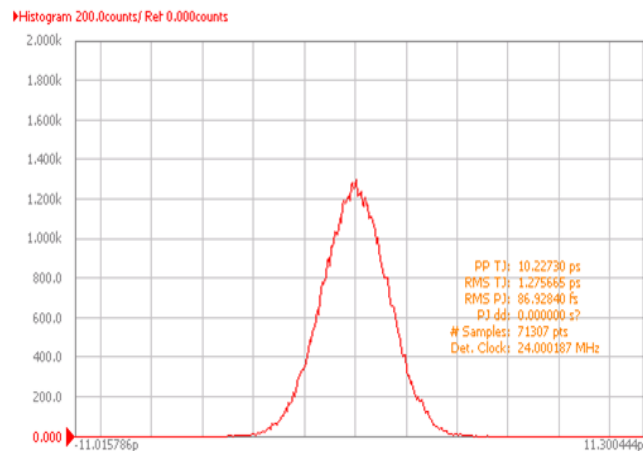


Frequency 48.000MHz

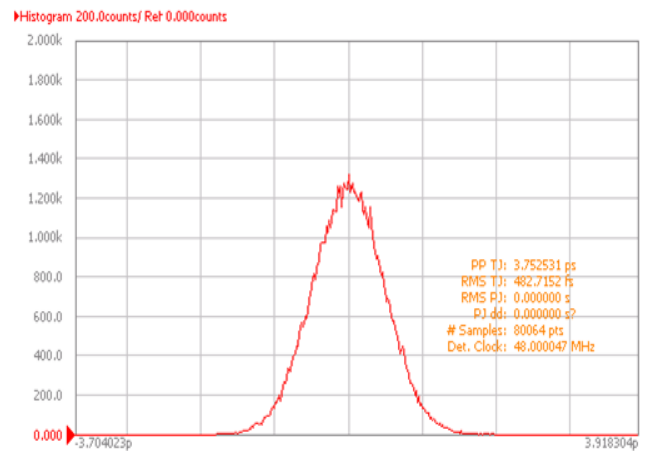


TYPICAL JITTER PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 24.000MHz



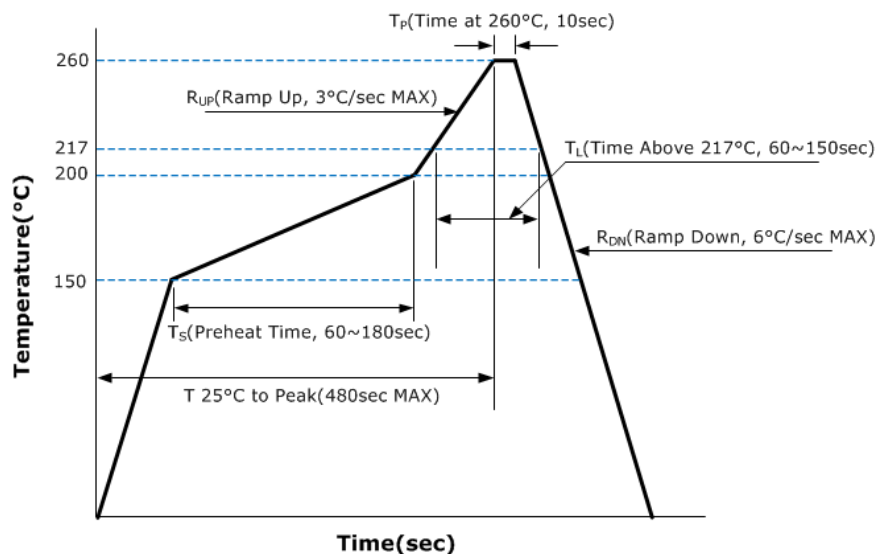
Frequency 48.000MHz



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

REFLOW PROFILE



MARKING

Frequency in MHz

Line 1: X X.X X X

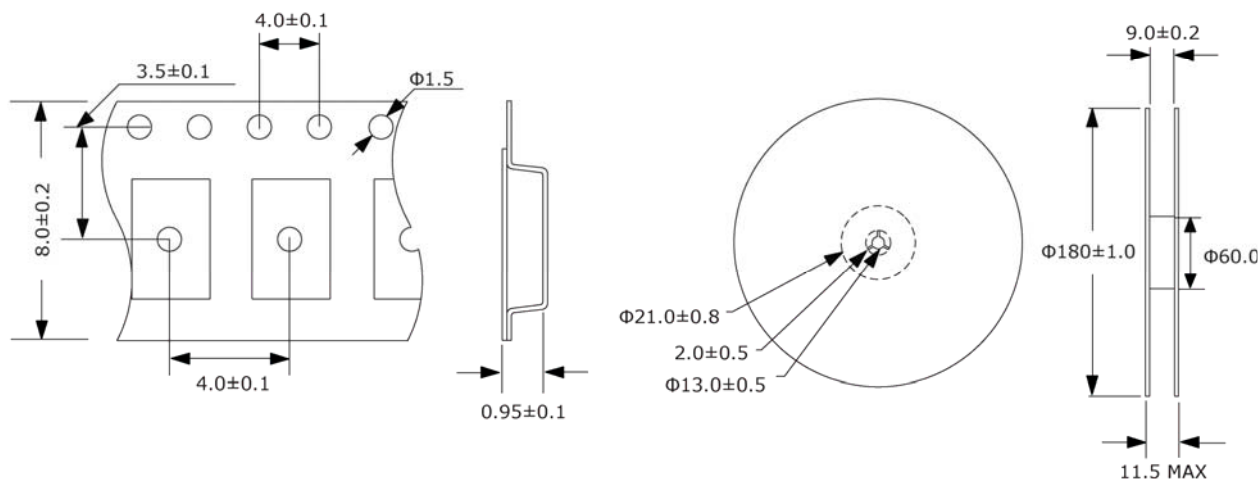
Line 2: S F Y W W

Suntsu Manufacturing Identifier

Week Year

TAPE AND REEL DIMENSIONS

3,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.