

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package CMOS RoHS Compliant Tape and Reel 	<ul style="list-style-type: none"> Mobile Communication Portable Electronics PDA

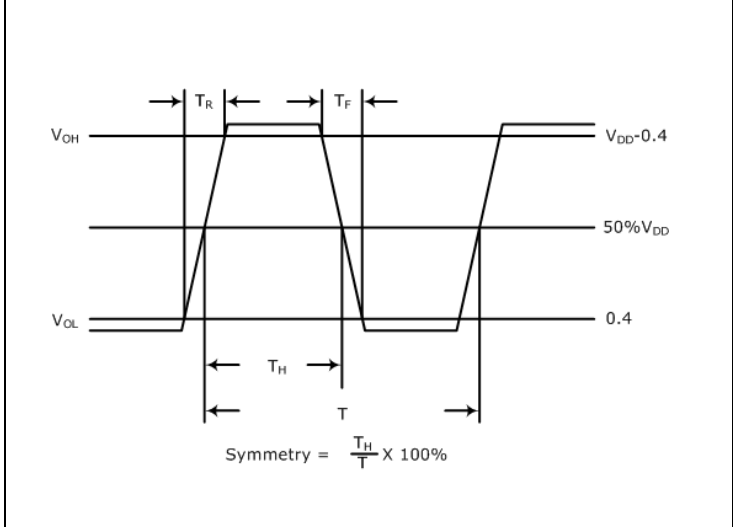
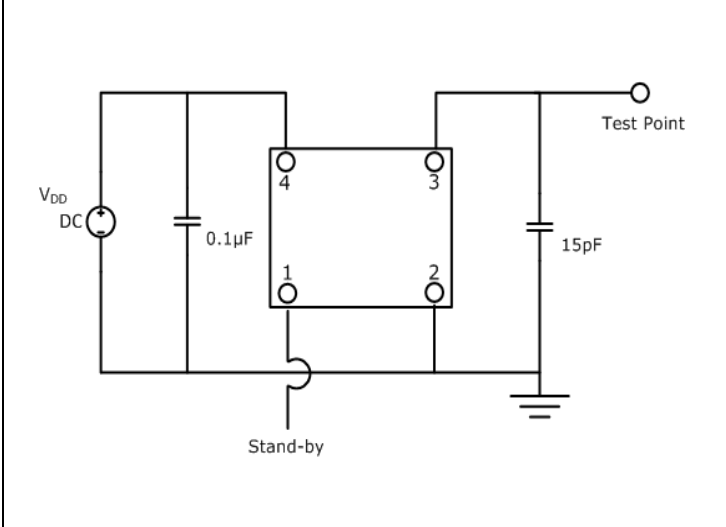


PART NUMBERING GUIDE	
<p>SUNTSU OSC → SXO 11 C 3 A 48 1 - 30.000M ← FREQUENCY (MHz)</p> <p>1.6mm x 1.2mm</p> <p>CMOS</p> <p>SUPPLY VOLTAGE 1: 1.8V±5% 2: 2.5V±5% 3: 3.3V±5%</p> <p>FREQUENCY STABILITY A: ±50ppm B: ±30ppm C: ±25ppm *D: ±20ppm</p>	<p>TRI-STATE (ENABLE/DISABLE) 1: Stand-by</p> <p>OPERATING 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</p>
<p>Cage Code: 4GUT4 To customize your parameters contact a Suntsu representative. * For frequency stability option D contact a Suntsu representative.</p>	

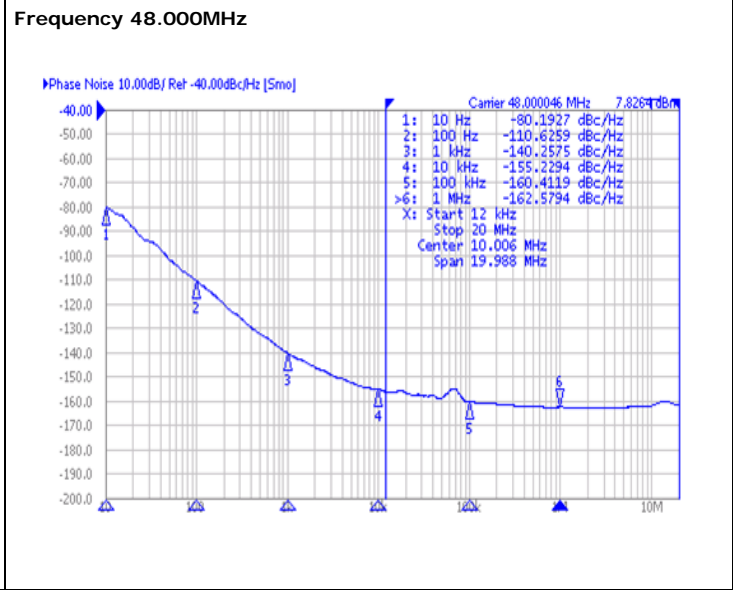
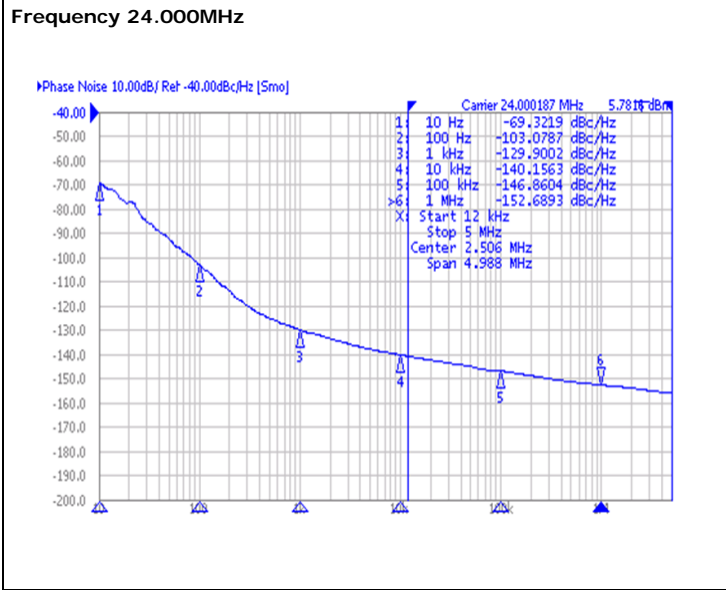
ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	1		80	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-20		+20	See part numbering guide for options.
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature		-55		+125	
Supply Voltage (V _{DD})	1.8V Option	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})	mA			10	
Output Load (CMOS)	pF			15	
Output Logic Levels	Output Logic High (V _{OH})	V _{DD} -0.4			
	Output Logic Low (V _{OL})			0.4	
Rise (T _R) and Fall (T _F) Time	ns			4.5	
Symmetry (Duty Cycle)	%	45	50	55	
Stand-by Input Voltage	Enable	0.7*V _{DD}			No Connection.
	Disable			0.3*V _{DD}	
Start-Up Time	ms			5.0	
Phase Jitter (12kHz ~ 20MHz)	ps			1	

OUTLINE DRAWING											
	<p>RECOMMENDED LAND PATTERN</p>										
	<table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>STAND-BY</td> </tr> <tr> <td>2</td> <td>GND</td> </tr> <tr> <td>3</td> <td>OUTPUT</td> </tr> <tr> <td>4</td> <td>V_{DD}</td> </tr> </tbody> </table>	PIN	FUNCTION	1	STAND-BY	2	GND	3	OUTPUT	4	V _{DD}
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3	OUTPUT										
4	V _{DD}										
<p>NOTE: Dimensions in millimeters (mm).</p>											

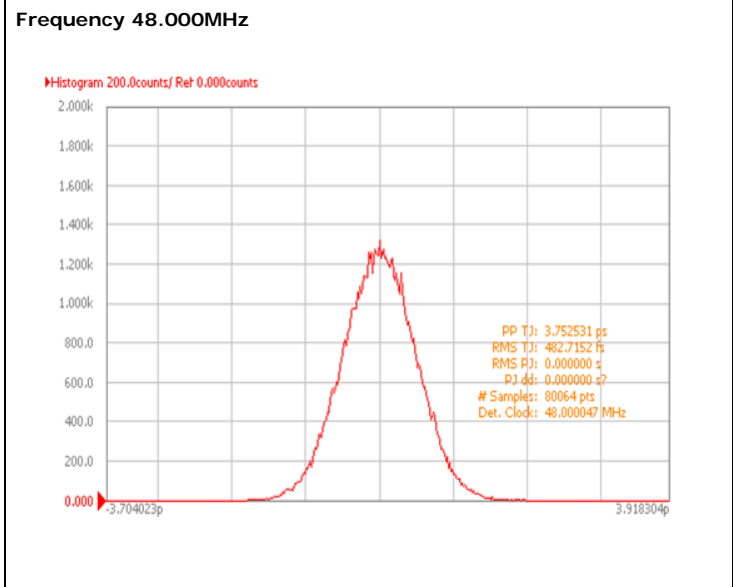
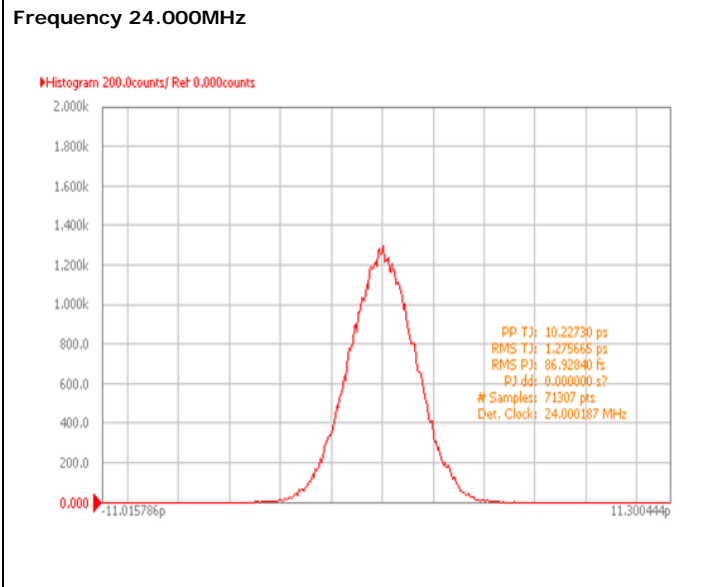
TEST CIRCUIT (CMOS) WAVEFORM (CMOS)



TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGILENT E5052A)



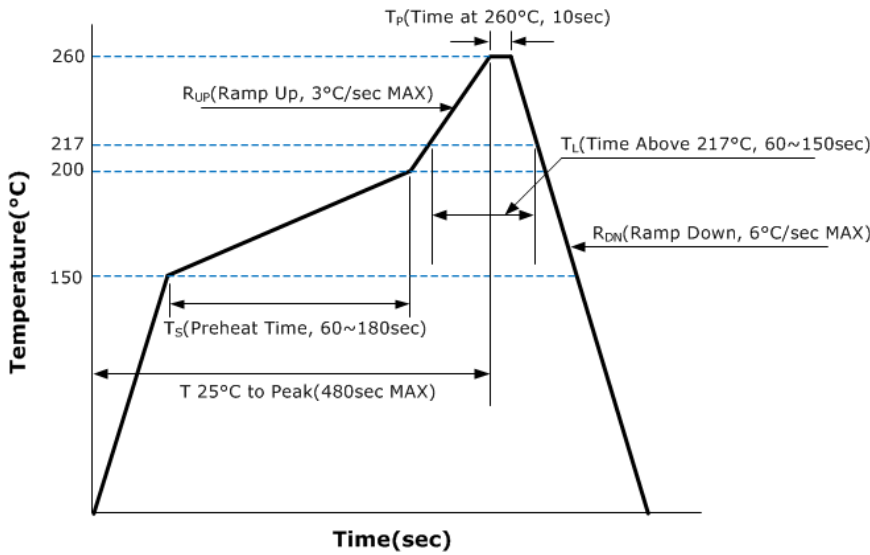
TYPICAL JITTER PERFORMANCE (MEASURED BY AGILENT E5052A)



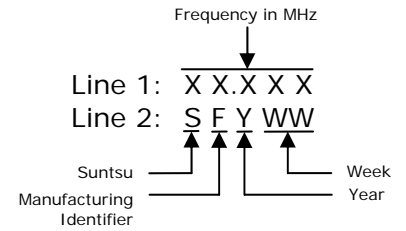
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

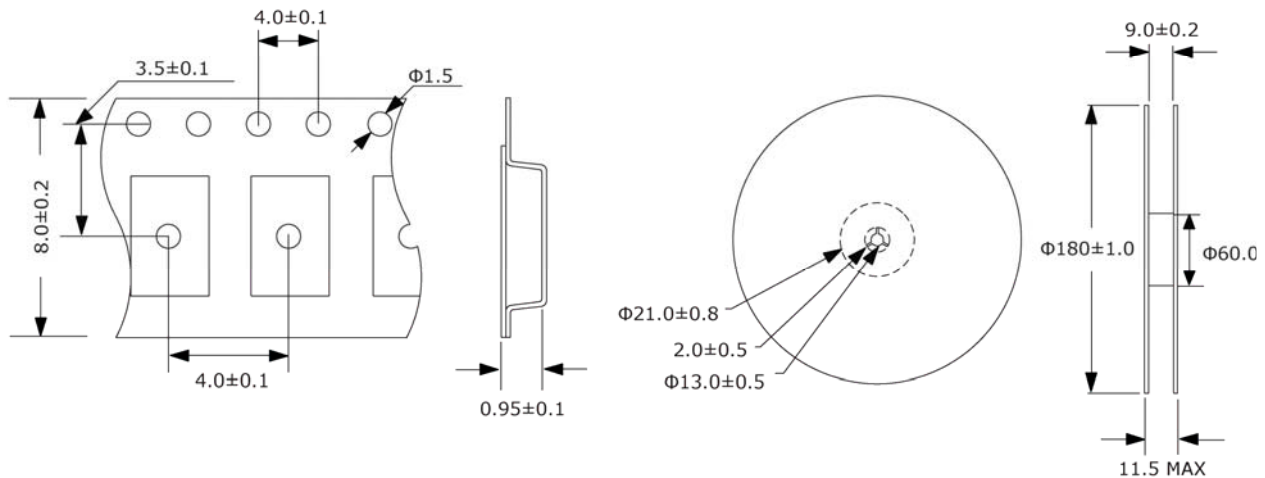


MARKING



TAPE AND REEL DIMENSIONS

3,000pcs/reel



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