

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>±20ppm (Frequency Stability) Available</li> <li>LVPECL</li> <li>RoHS Compliant</li> <li>Programmed Oscillator</li> <li>Wide Frequency Range</li> </ul>	<ul style="list-style-type: none"> <li>Ethernet (10G/40G/100G)</li> <li>Base Stations</li> <li>Wi-Fi</li> <li>DSL/ADSL</li> <li>Communications</li> </ul>



### PART NUMBERING GUIDE

**SUNTSU QUICK TURN OSC** → **SQG 22 P 3 A 48 1 - 156.250M** ← **FREQUENCY (MHz)**

- 2.5 mm x 2.0mm** →
- LVPECL** →
- SUPPLY VOLTAGE**
  - 2: 2.5V±5%
  - 3: 3.3V±5%
- FREQUENCY STABILITY**
  - A: ±50ppm
  - B: ±30ppm
  - C: ±25ppm
  - \*D: ±20ppm
- TRI-STATE (ENABLE/DISABLE)**
  - 1: Pin 1
  - 2: Pin 2
- 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 D contact a Suntsu representative.

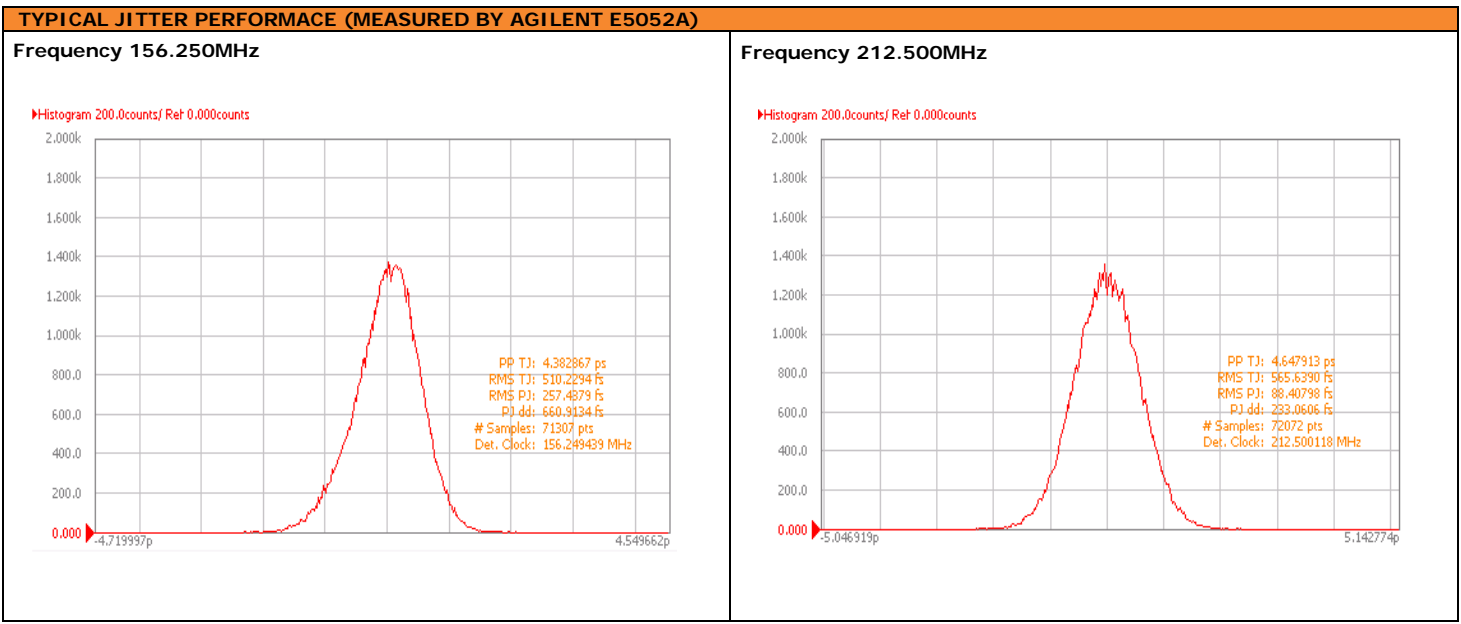
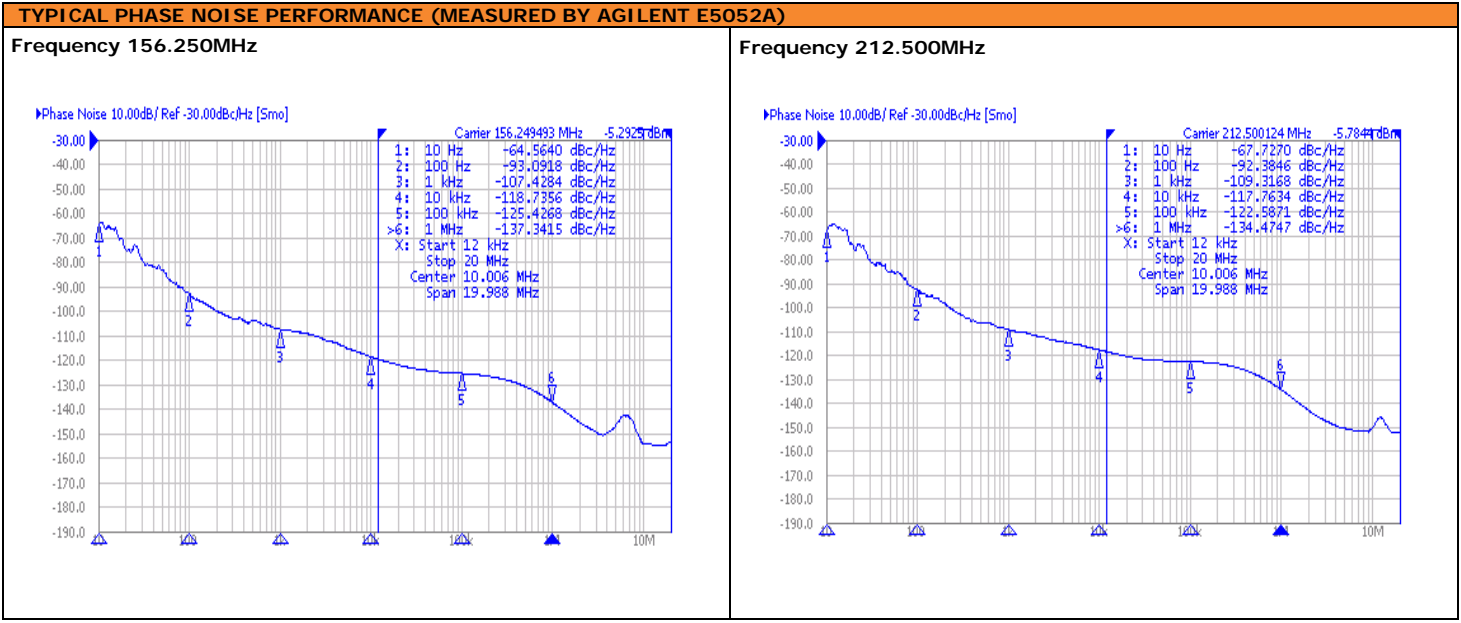
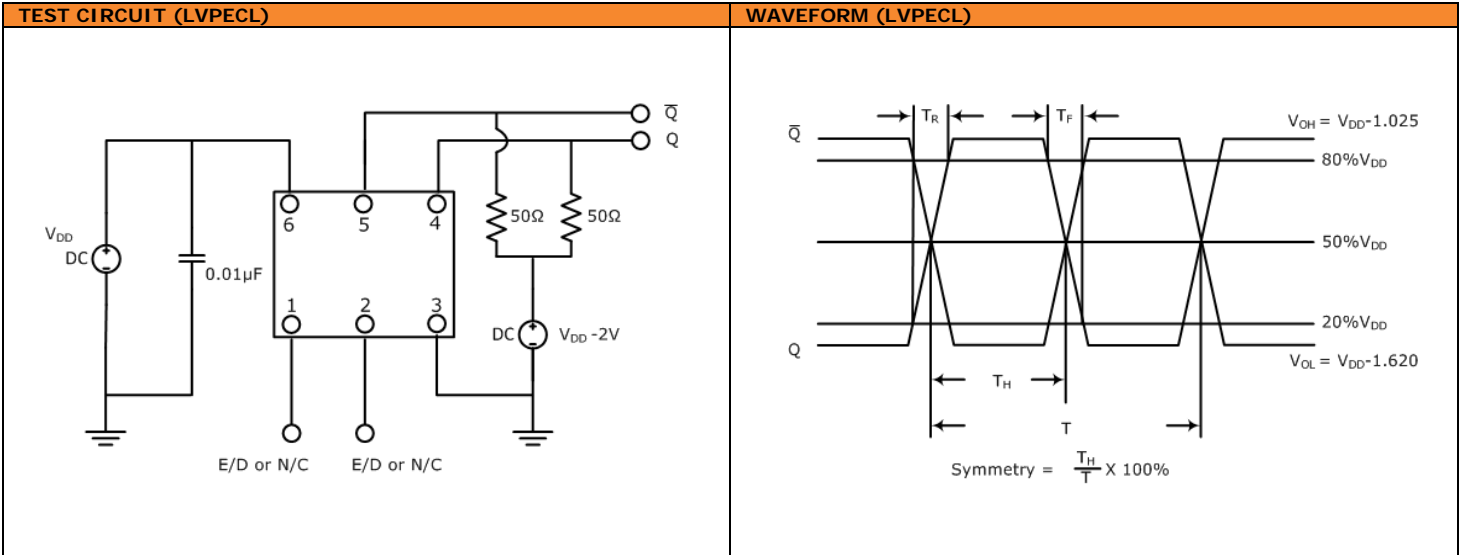
ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	8		1500	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)		ppm	-20		+20	See part numbering guide for options.
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature			-55		+125	
Supply Voltage (V <sub>DD</sub> )	2.5V Option	V	2.375	2.5	2.625	
	3.3V Option		3.135	3.3	3.465	
Current (I <sub>DD</sub> )	2.5V Option	mA			60	
	3.3V Option				65	
Output Load (LVPECL)		Ω			50	50 Ω into V <sub>DD</sub> -2.0V <sub>DC</sub> .
Output Logic Levels	Output Logic High (V <sub>OH</sub> )	V	V <sub>DD</sub> -1.025			
	Output Logic Low (V <sub>OL</sub> )				V <sub>DD</sub> -1.62	
Rise (T <sub>R</sub> ) and Fall (T <sub>F</sub> ) Time		ns			1	
Symmetry (Duty Cycle)		%	45	50	55	
Tri-State Input Voltage	Enable	V	0.7*V <sub>DD</sub>			No Connection.
	Disable				0.3*V <sub>DD</sub>	
Start-Up Time		ms			10	
Phase Jitter (12kHz ~ 20MHz)		ps		0.5	1.5	

### OUTLINE DRAWING

**RECOMMENDED LAND PATTERN**

PIN	FUNCTION
1	TRI-STATE or NC
2	TRI-STATE or NC
3	GND
4	OUTPUT
5	COMP OUTPUT
6	V <sub>DD</sub>

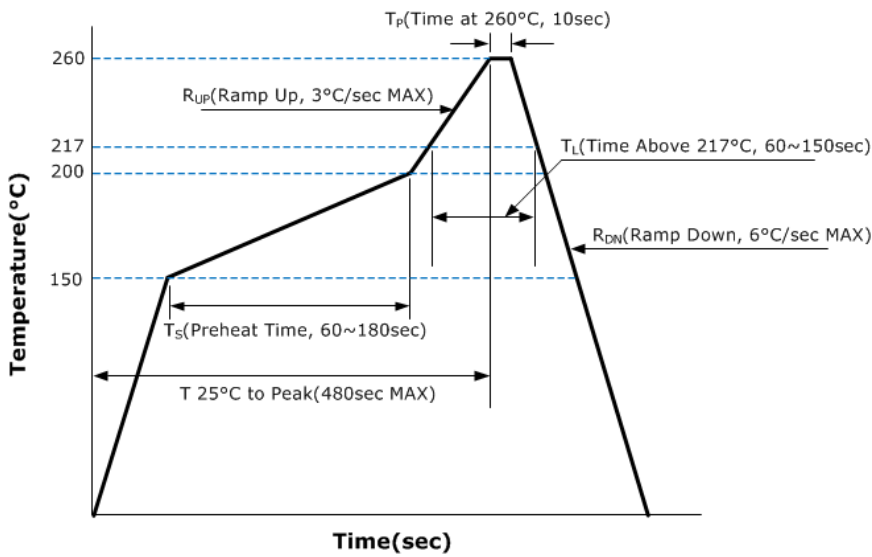
NOTE: Dimensions in millimeters (mm).



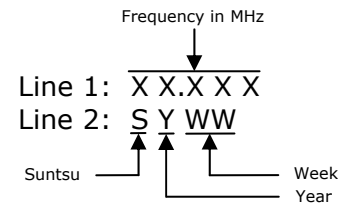
### ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

### REFLOW PROFILE

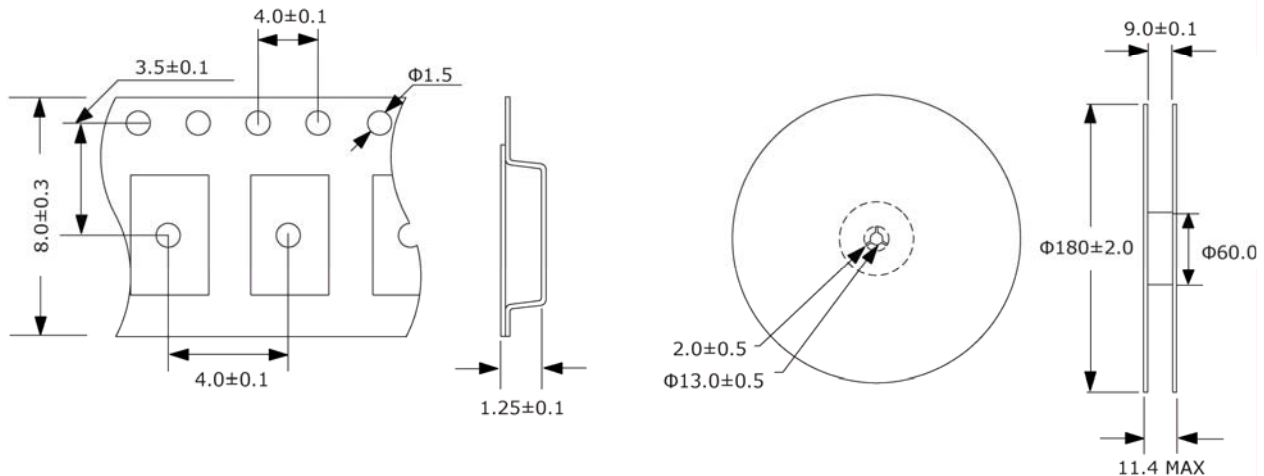


### MARKING



### TAPE AND REEL DIMENSIONS

3,000pcs/reel



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