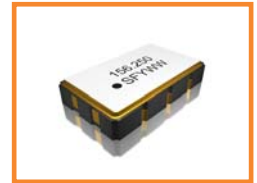


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - ±20ppm (Frequency Stability) Available - Ceramic Package - LVPECL - RoHS Compliant - Programmed VCXO - Tape and Reel 	<ul style="list-style-type: none"> - Micro Processors - FPGA - Storage Area/Networking - Digital Video - Portable Computers

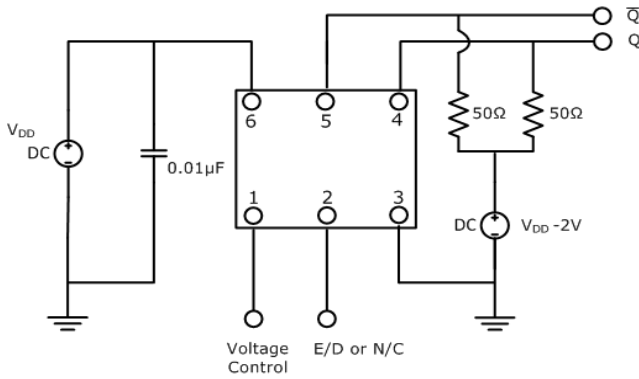


PART NUMBERING GUIDE	
<p>SUNTSU QUICK TURN VCXO → SQV 53 P 3 A 48 A 2 - 156.250M ← FREQUENCY (MHz)</p> <p>5.0mm x 3.2mm</p> <p>LVPECL</p> <p>SUPPLY VOLTAGE 2: 2.5V±5% 3: 3.3V±5%</p> <p>FREQUENCY STABILITY A: ±50ppm B: ±30ppm C: ±25ppm *D: ±20ppm</p>	<p>TRI-STATE (ENABLE/ DISABLE) BLANK: NO CONNECT 2: Pin 2</p> <p>PULLABILITY A: ±150ppm B: ±100ppm C: ±50ppm</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>	

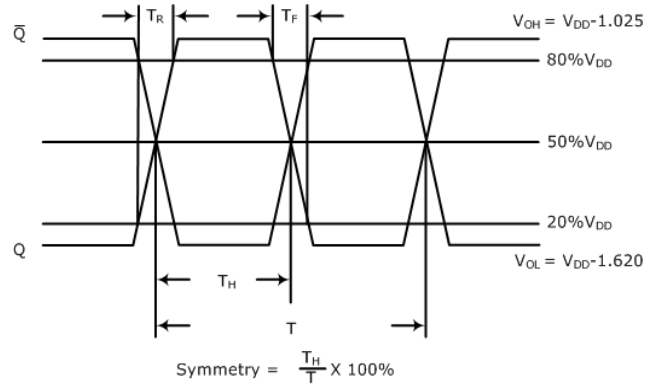
ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	8		1500	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)		ppm	-20		+20	See part numbering guide for options.
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature			-55		+125	
Supply Voltage (V _{DD})	2.5V Option	V	2.375	2.5	2.625	
	3.3V Option		3.135	3.3	3.465	
Current (I _{DD})	2.5V Option	mA			65	
	3.3V Option				70	
Control Voltage (V _C)	2.5V Option	V	0		2.5	
	3.3V Option		0		3.3	
Pullability		ppm	±50	±100	±150	See part numbering guide for options.
Linearity		%			10	
Output Load (CMOS)		Ω			50	50 Ω into V _{DD} -2.0V _{DC} .
Output Logic Levels	Output Logic High (V _{OH})	V	V _{DD} -1.025			
	Output Logic Low (V _{OL})				V _{DD} -1.620	
Rise (T _R) and Fall (T _F) Time		ns			1	
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		0.7	1.5	

OUTLINE DRAWING															
	<p>RECOMMENDED LAND PATTERN</p>														
<p>NOTE: Dimensions in millimeters (mm).</p>	<table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>VOLTAGE CONTROL</td> </tr> <tr> <td>2</td> <td>TRI-STATE or NC</td> </tr> <tr> <td>3</td> <td>GND</td> </tr> <tr> <td>4</td> <td>OUTPUT</td> </tr> <tr> <td>5</td> <td>COMP OUTPUT</td> </tr> <tr> <td>6</td> <td>V_{DD}</td> </tr> </tbody> </table>	PIN	FUNCTION	1	VOLTAGE CONTROL	2	TRI-STATE or NC	3	GND	4	OUTPUT	5	COMP OUTPUT	6	V _{DD}
PIN	FUNCTION														
1	VOLTAGE CONTROL														
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4	OUTPUT														
5	COMP OUTPUT														
6	V _{DD}														

TEST CIRCUIT (LVPECL)

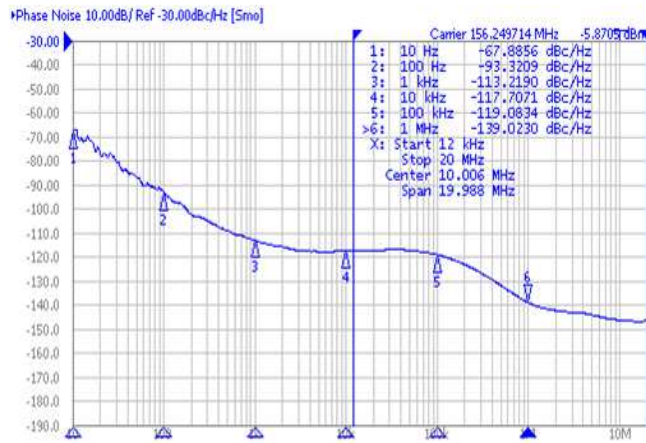


WAVEFORM (LVPECL)

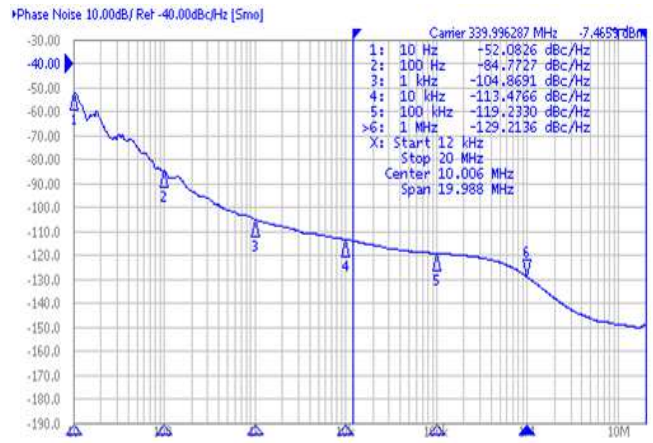


TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 156.250MHz

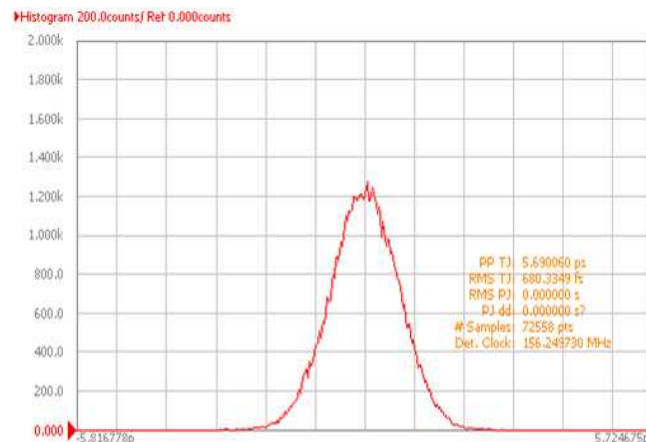


Frequency 340.000MHz

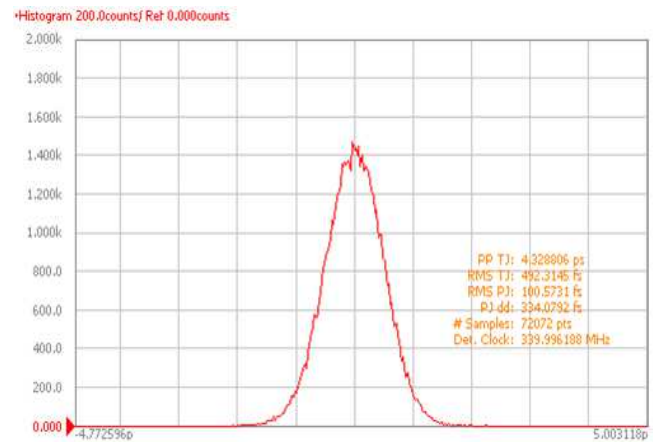


TYPICAL JITTER PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 156.250MHz



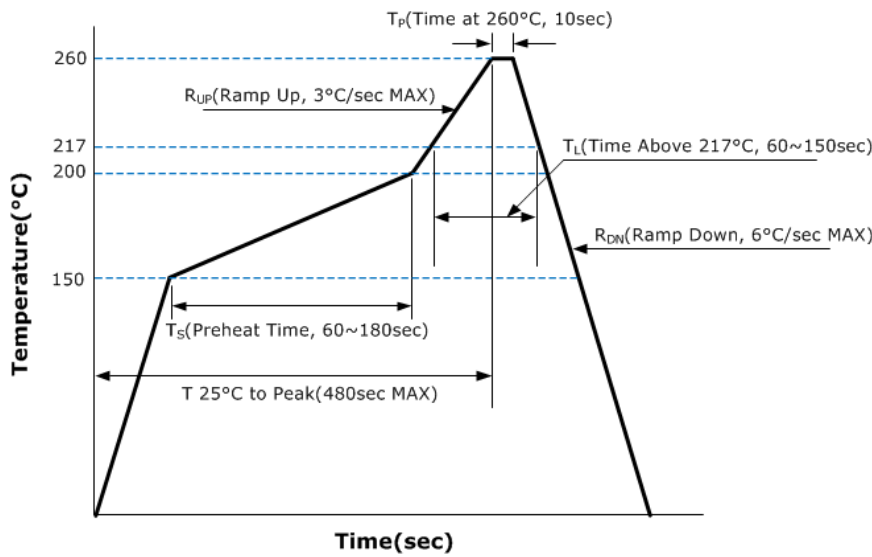
Frequency 340.000MHz



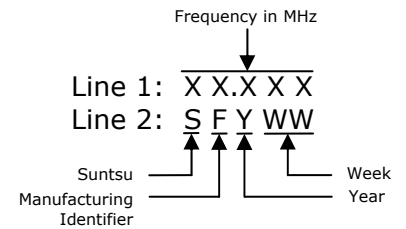
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

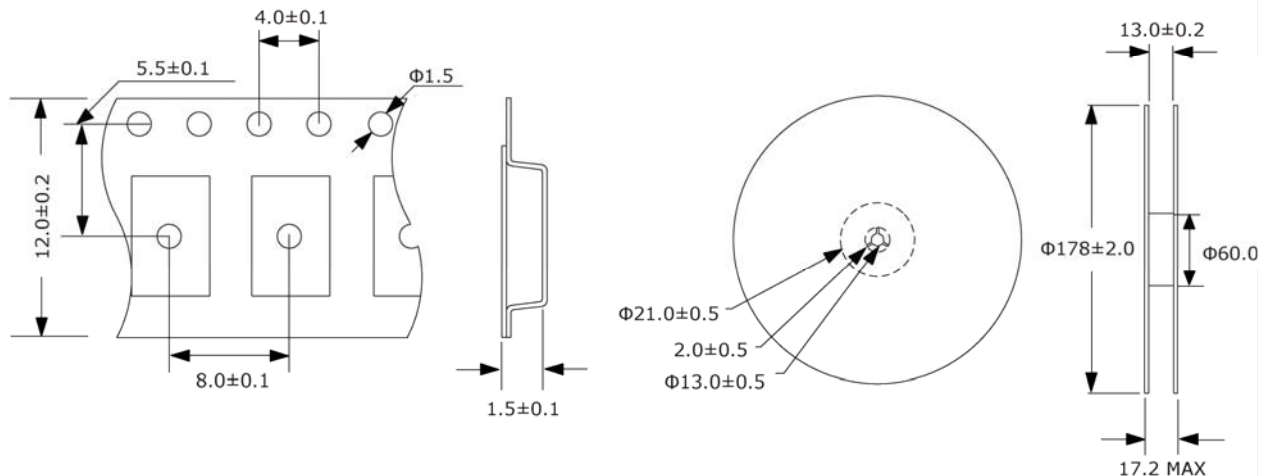


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



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