

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - ±20ppm (Frequency Stability) Available - Low Phase Noise and Jitter Performance - RoHS Compliant - Tape and Reel 	<ul style="list-style-type: none"> - High Definition TV - Avionics - Low Phase Signal Sources - Test and Measurement Equipment



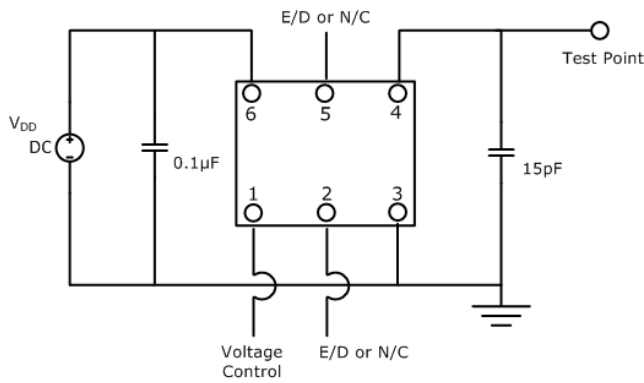
PART NUMBERING GUIDE	
<p>SUNTSU VCXO → SVC F6 C 3 A 48 B 2 - 27.000M ← FREQUENCY (MHz)</p> <p>FR4 PCB 6 PAD →</p> <p>CMOS →</p> <p>SUPPLY VOLTAGE 3: 3.3V±5% 5: 5.0V±5%</p> <p>FREQUENCY STABILITY A: ±50ppm B: ±30ppm C: ±25ppm *D: ±20ppm</p>	<p>TRI-STATE (ENABLE/ DISABLE) BLANK: NO CONNECTION 2: Pin 2 5: Pin 5</p> <p>PULLABILITY 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>

Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.
* For frequency stability option D contact a Suntsu representative.

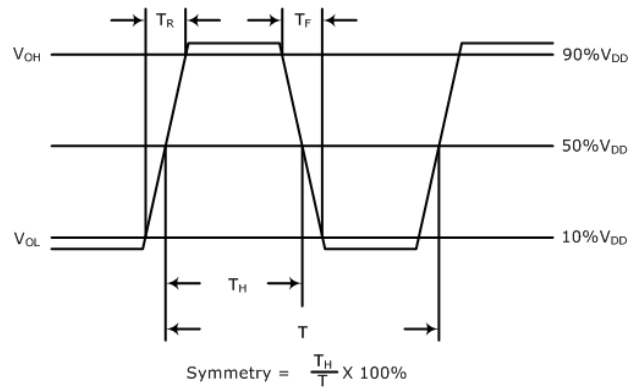
ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	10		250	~160MHz at 5.0V
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-25		+25	See part numbering guide for options.
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature	°C	-45		+90	
Supply Voltage (V _{DD})	3.3V Option	3.135	3.3	3.465	
	5.0V Option	4.750	5.0	5.250	
Current (I _{DD})	3.3V Option			40	
	5.0V Option			60	
Control Voltage (V _C)	3.3V Option	0.0		3.3	
	5.0V Option	0.0		5.0	
Pullability	ppm	±50		±100	See part numbering guide for options.
Input Impedance	kΩ			51	
Modulation Bandwidth	kHz	10			@-3dB.
Linearity	%			10	
Output Load (CMOS)	pF			15	
Output Logic Levels	Output Logic High (V _{OH})	0.9*V _{DD}			
	Output Logic Low (V _{OL})			0.1*V _{DD}	
Rise (T _R) and Fall (T _F) Time	ns			3	
Symmetry (Duty Cycle)	%	45	50	55	
Start-Up Time	ms			10	
Phase Jitter (12kHz ~ 20MHz)	ps			1	

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>TRI-STATE or NC</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	TRI-STATE or NC	6	V _{DD}
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TEST CIRCUIT (CMOS)

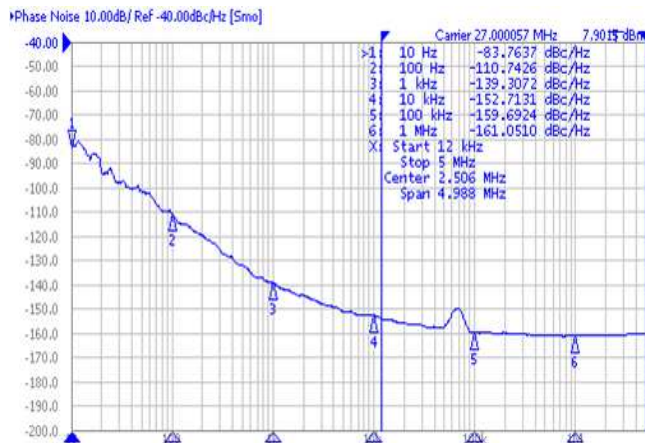


WAVEFORM (CMOS)

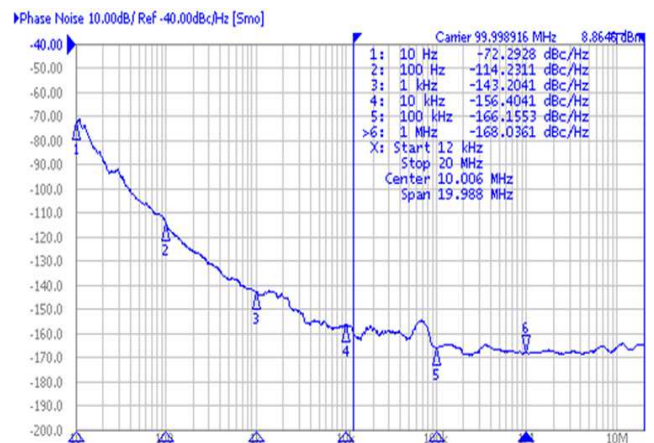


TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGI LENT E5052A)

Frequency 50.000MHz

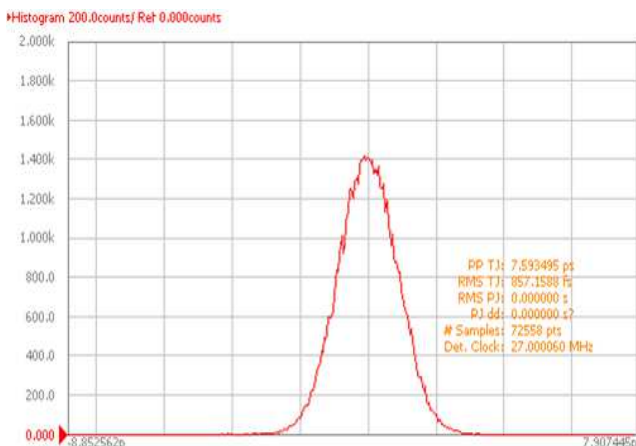


Frequency 100.000MHz

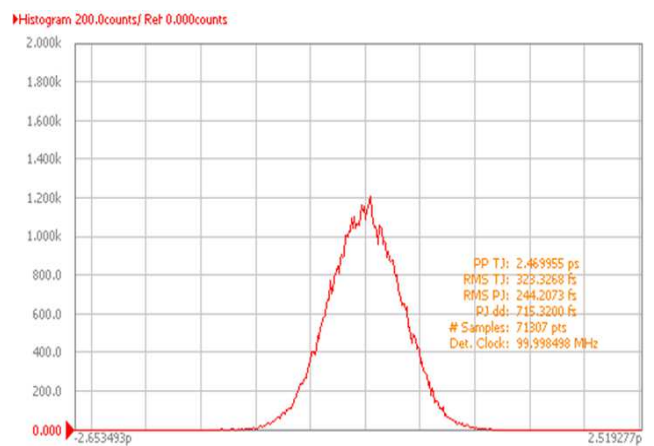


TYPICAL JITTER PERFORMANCE (MEASURED BY AGI LENT E5052A)

Frequency 50.000MHz



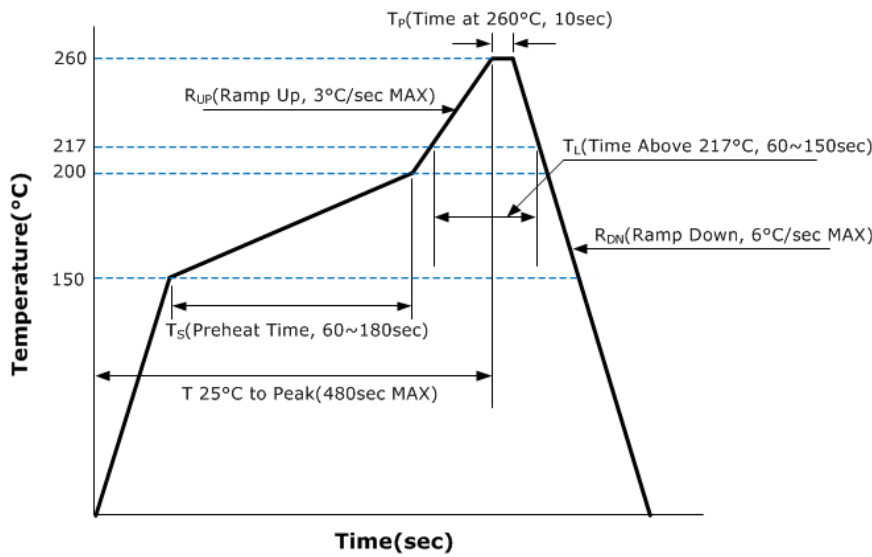
Frequency 100.000MHz



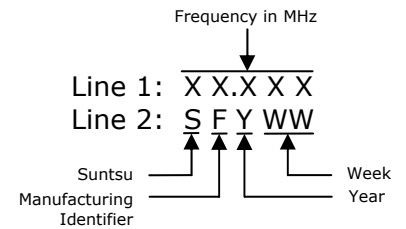
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

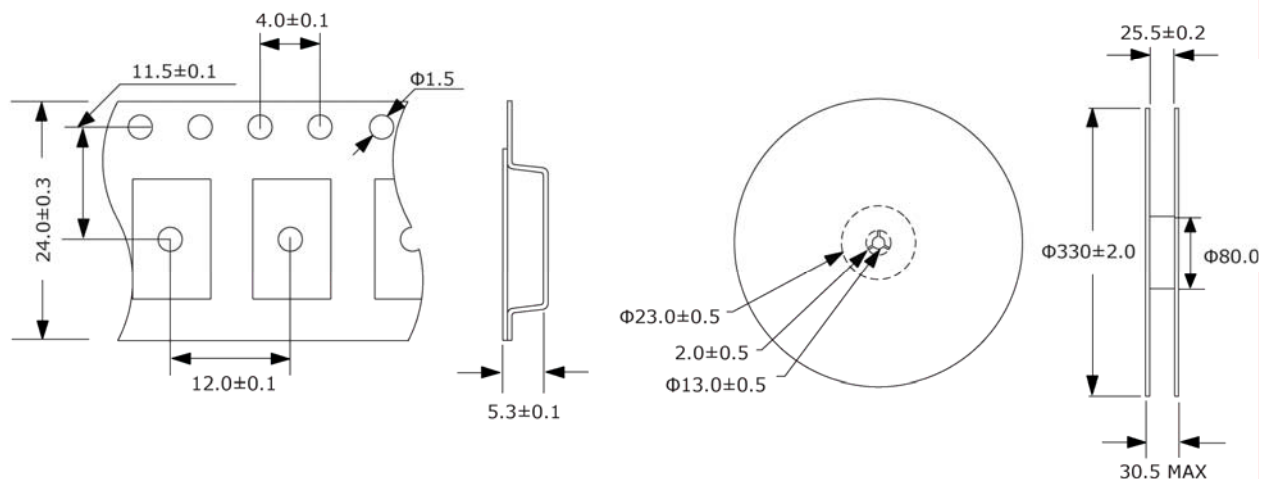


MARKING



TAPE AND REEL DIMENSIONS

500pcs/reel



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