

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

SUNTSU QUICK TURN VCXO → **SQV 75 P 3 A 48 A 2 - 67.500M** ← **FREQUENCY (MHz)**

- 7.0mm x 5.0mm** (Package Size)
- LVPECL** (Logic Family)
- SUPPLY VOLTAGE**
 - 2: 2.5V±5%
 - 3: 3.3V±5%
- FREQUENCY STABILITY**
 - A: ±50ppm
 - B: ±30ppm
 - C: ±25ppm
 - *D: ±20ppm
- TRI-STATE (ENABLE/ DISABLE)**
 - BLANK: NO CONNECT
 - 2: Pin 2
- PULLABILITY**
 - A: ±150ppm
 - B: ±100ppm
 - C: ±50ppm
- 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 _{DD})	2.5V Option	2.375	2.5	2.625	
	3.3V Option	3.135	3.3	3.465	
Current (I _{DD})	2.5V Option			65	
	3.3V Option			70	
Control Voltage (V _C)	2.5V Option	0		2.5	
	3.3V Option	0		3.3	
Pullability	ppm	±50	±100	±150	See part numbering guide for options.
Linearity	%			10	
Output Load (LVPECL)	Ω			50	50 Ω into V _{DD} -2.0V _{DC} .
Output Logic Levels	Output Logic High (V _{OH})	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	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	

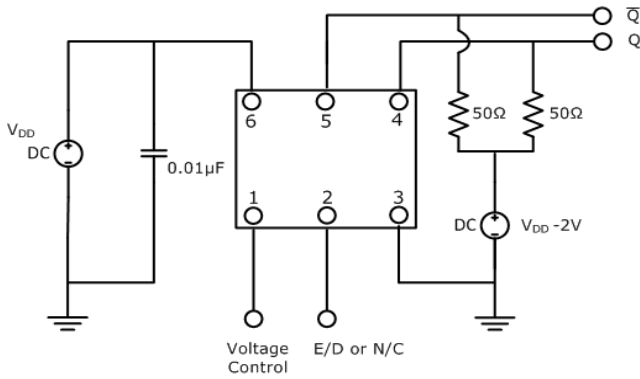
OUTLINE DRAWING

RECOMMENDED LAND PATTERN

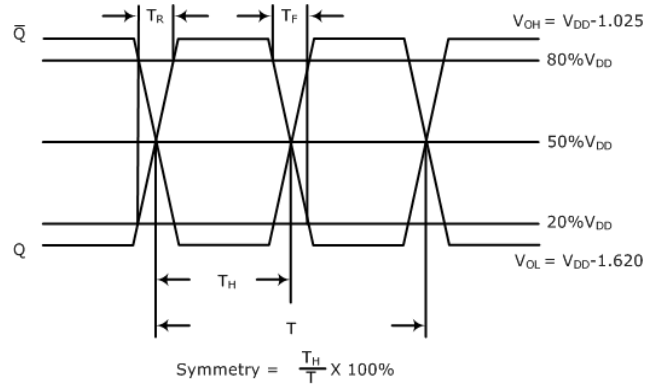
PIN	FUNCTION
1	VOLTAGE CONTROL
2	TRI-STATE or NC
3	GND
4	OUTPUT
5	COMP OUTPUT
6	V _{DD}

NOTE: Dimensions in millimeters (mm).

TEST CIRCUIT (LVPECL)

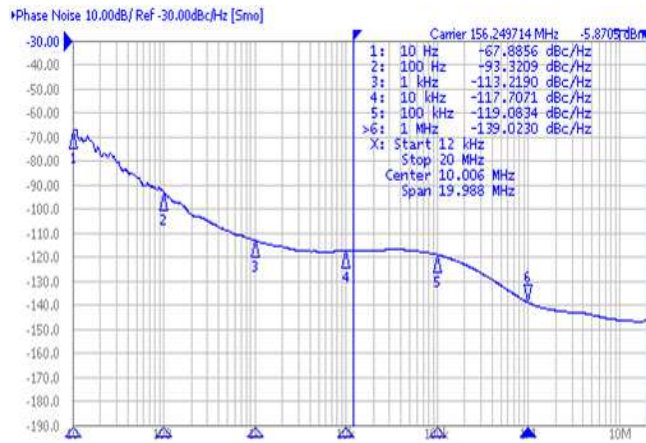


WAVEFORM (LVPECL)

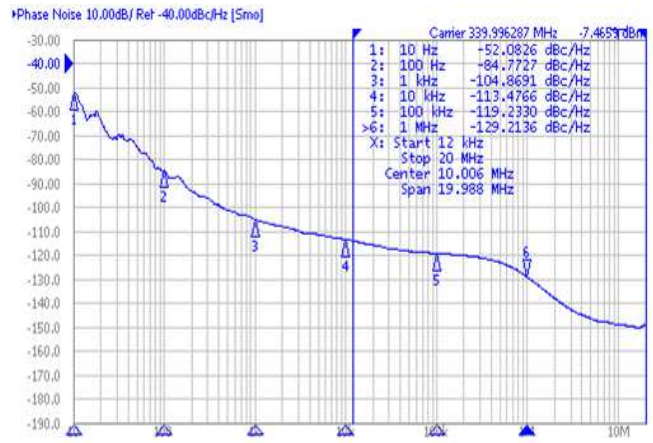


TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 156.250MHz

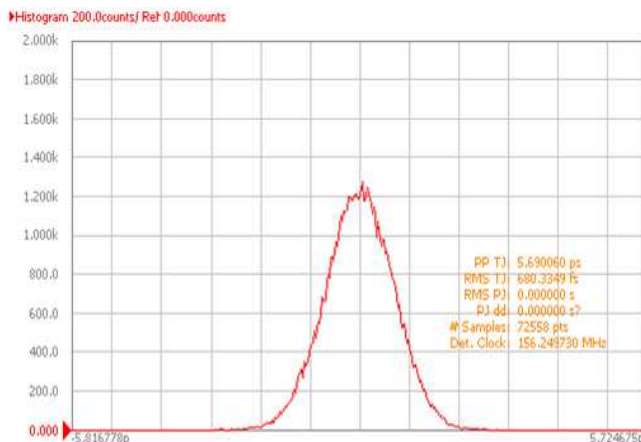


Frequency 340.000MHz

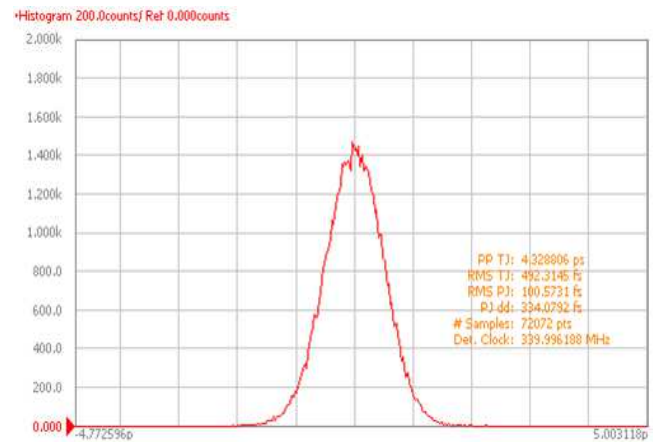


TYPICAL JITTER PERFORMANCE (MEASURED BY AGILENT E5052A)

Frequency 156.250MHz



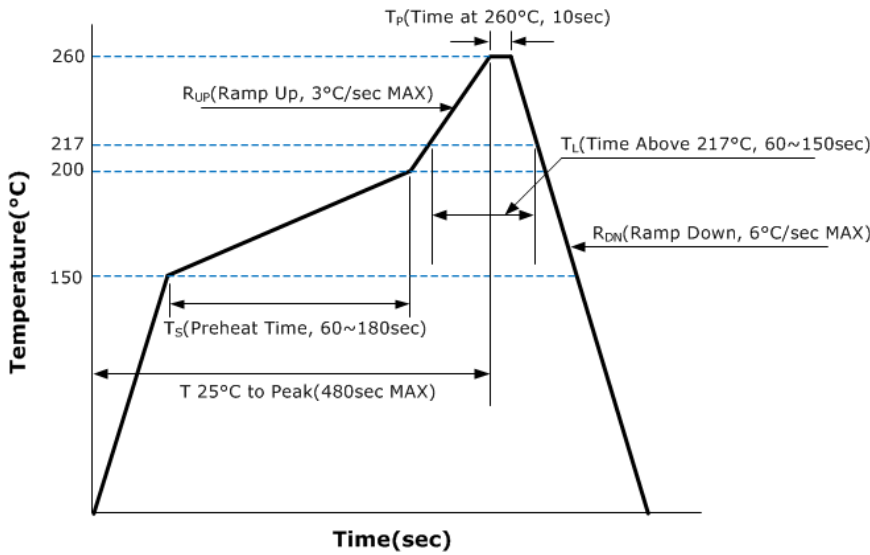
Frequency 340.000MHz



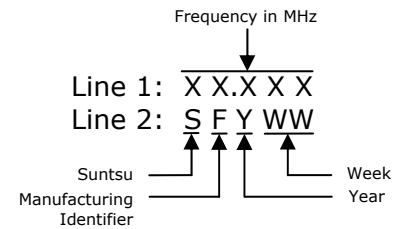
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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

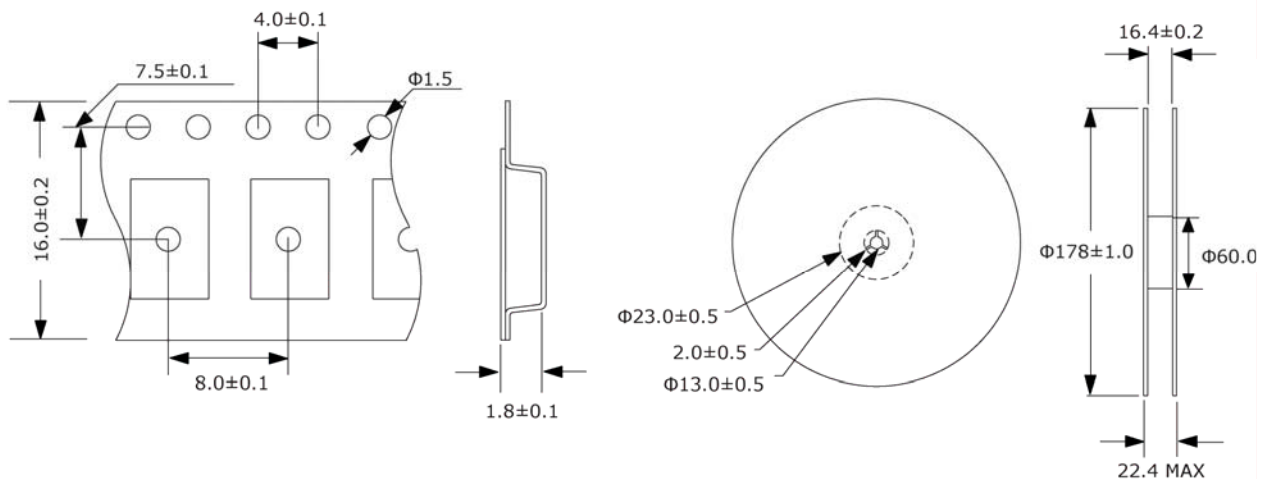


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



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