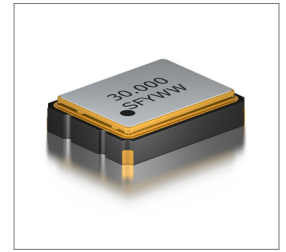


Features
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package LVDS Programmed VCXO Tape and Reel

Applications
<ul style="list-style-type: none"> Micro Processors FPGA Storage Area/Networking Digital Video Portable Computers


Part Numbering Guide
SQV 32 L 3 A 48 A 2 - 100.000M

 SUNTSU QUICK
 TURN VCXO

3.2mm x 2.5mm

LVDS

SUPPLY VOLTAGE
 2 : 2.5V±5%
 3 : 3.3V±5%

FREQUENCY STABILITY
 A : ±50ppm
 B : ±30ppm
 C : ±25ppm
 D : ±20ppm
 *E : ±15ppm

OPERATING TEMPERATURE RANGE
 07 : 0°C - +70°C
 16 : -10°C - +60°C
 17 : -10°C - +70°C
 27 : -20°C - +70°C
 38 : -30°C - +85°C
 48 : -40°C - +85°C

PULLABILITY
 A : ±150ppm
 B : ±100ppm
 C : ±80ppm

FREQUENCY
 MHz

**TRI-STATE
 (ENABLE/DISABLE)**
 2 : Pin 2


Cage Code: 4GUT4

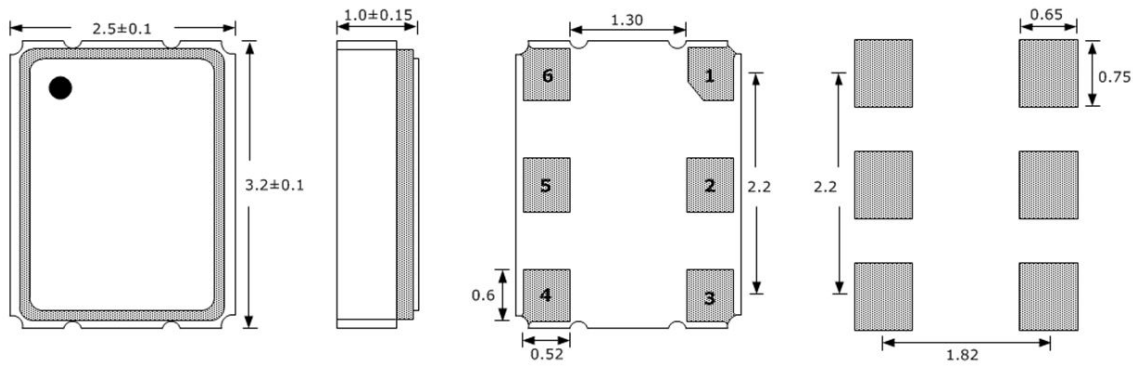
To customize your parameters contact a Suntsu representative.

* For frequency stability option E contact a Suntsu representative.

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	8		1500	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Op Temp, 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	°C	-55		125	
Supply Voltage (V _{DD}) 2.5V Option	V		2.5	2.625	
Supply Voltage (V _{DD}) 3.3V Option	V	3.135	3.3	3.465	See part numbering guide for options.
Current (I _{DD}) 2.5V Option	mA			65	
Current (I _{DD}) 3.3V Option	mA			70	
Current Voltage (V _c) 2.5V Option	V	0		2.5	
Current Voltage (V _c) 3.3V Option	V	0		3.3	
Pullability	ppm	±50	±100	±150	See part numbering guide for options.
Linearity	%			10	
Output Load (LVDS)	Ω			100	
Output Logic HIGH Level (V _{OH})	V		1.43	1.6	
Output Logic LOW Level (V _{OL})	V	0.9	1.1		
Differential Output Voltage (V _{OD})	mV	247	330	454	
Differential Output Error (pV _{OD})	mV			50	
Offset Voltage (V _{OS})	V	1.125	1.250	1.375	
Offset Error (pV _{OS})	mV			50	
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}			
Tri-State Input Voltage - Disable	V			0.3*V _{DD}	
Start-Up Time	ms			10	
Phase Jitter (12KHz ~ 20MHz)	ps		0.7	1.5	

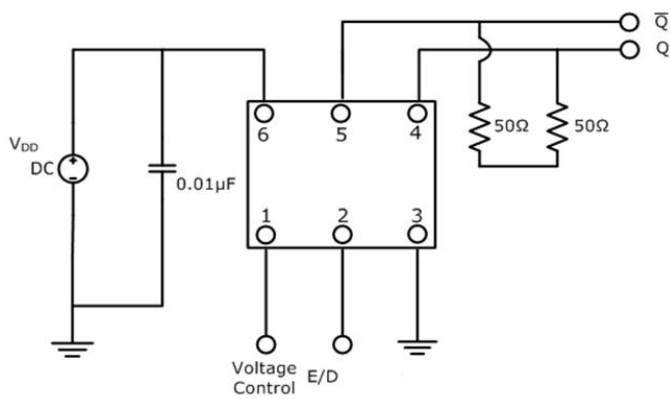
Outline Drawing & Land Pattern

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

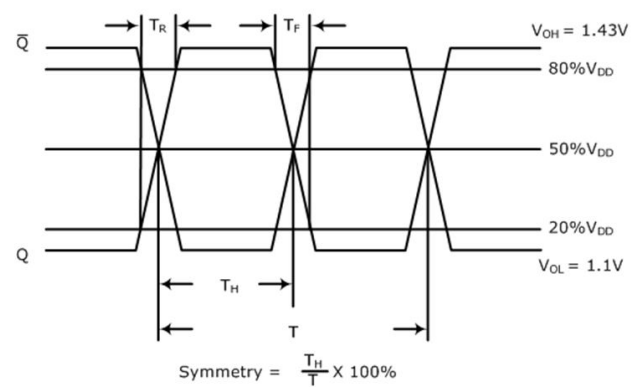


PIN	FUNCTION
1	Voltage Control
2	E/D
3	GND
4	OUTPUT
5	COMP OUTPUT
6	VDD

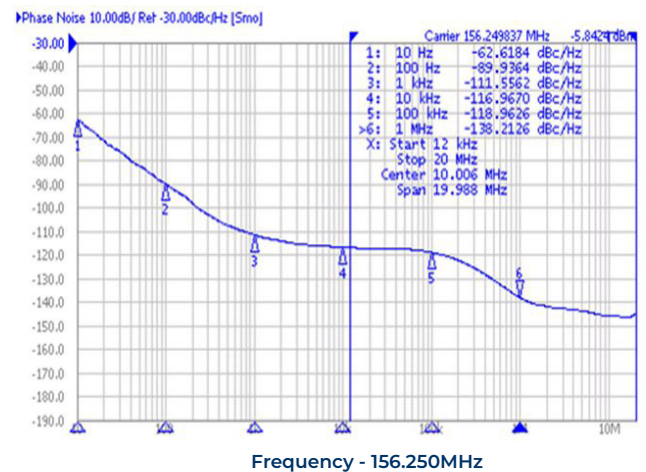
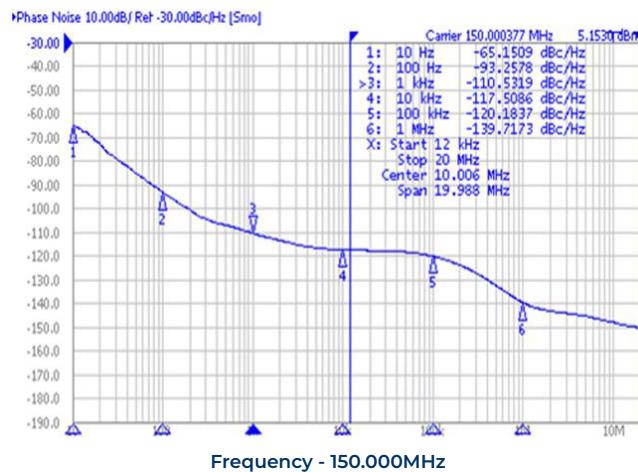
Test Circuit (LVDS)



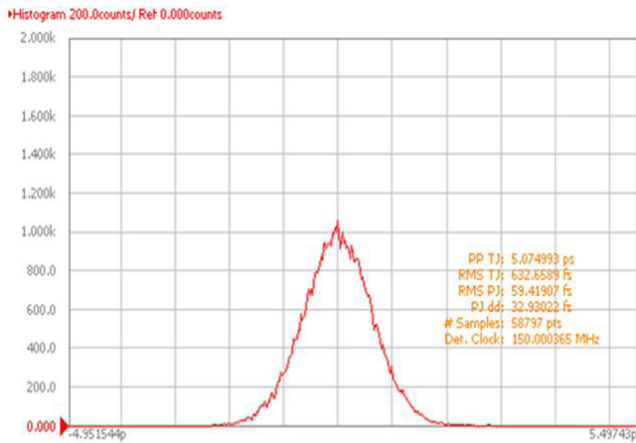
Waveform (LVDS)



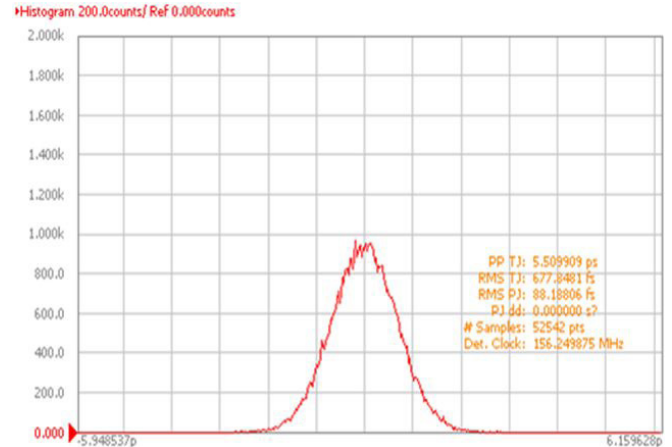
Typical Phase Noise Performance (Measured By Agilent E5052A)



Typical Jitter Performance (Measured By Agilent E5052A)

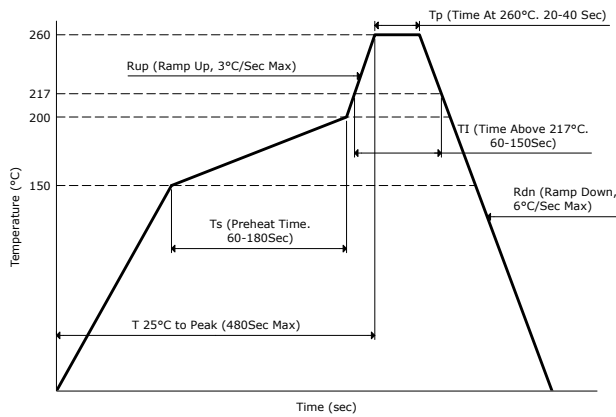


Frequency - 150.000MHz

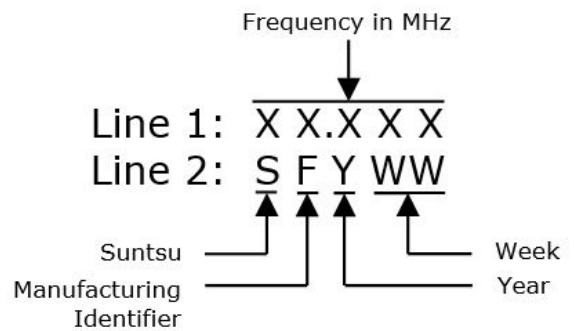


Frequency - 156.250MHz

Reflow Profile



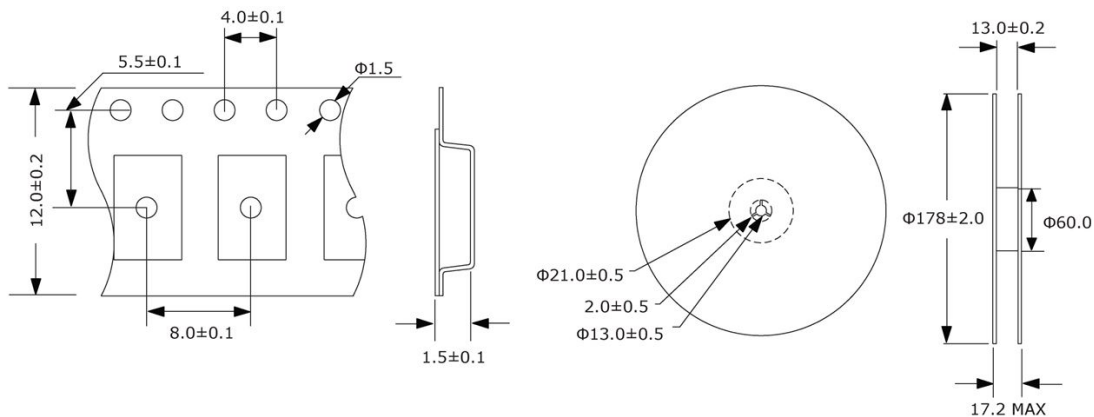
Part Marking



Tape And Reel Dimensions

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

1,000pcs/Reel



Environmental Specifications		Mechanical Specifications	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A	Vibration	MIL-STD-883, Method 2007, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	Moisture Resistance	MIL-STD-883, Method 1004
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215
Moisture Sensitivity	J-STD-020, MSL 1	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K