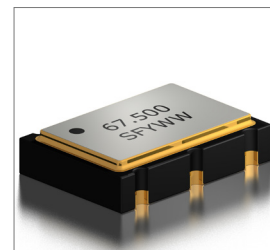


Features

- ± 20 ppm (Frequency Stability) Available
- Ceramic Package
- LVPECL
- Fundamental or PLL (Phase Lock Loop) Available
- Tape and Reel

Applications

- Fiber Channel
- Gigabit Ethernet
- PCI Express
- SONET



Part Numbering Guide

SVC 75 P 3 A 48 A 2 - 67.500M

SUNTSU VCXO

7.0mm x 5.0mm

LVPECL

SUPPLY VOLTAGE
2 : 2.5V $\pm 5\%$
3 : 3.3V $\pm 5\%$

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

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 : ± 150 ppm
B : ± 100 ppm
C : ± 80 ppm
D : ± 50 ppm

FREQUENCY
MHz
TRI-STATE (ENABLE/DISABLE)
BLANK : No Connect
2 : Pin 2



Cage Code: 4GUT4

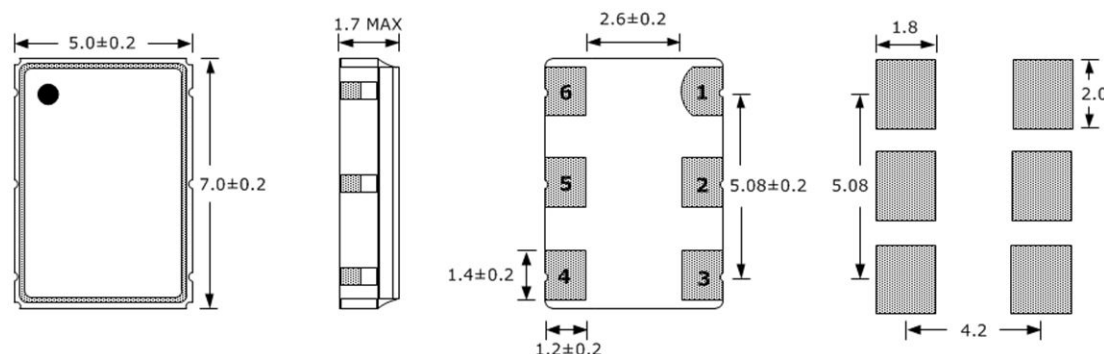
To customize your parameters contact a Suntsu representative.

* For frequency stability option E contact a Suntsu representative.

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	9.5		800	
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	°C	-55		+125	
Supply Voltage (V _{DD}) 2.5V Option	V	2.375	2.5	2.625	Only available with AT-Cut Fundamental.
Supply Voltage (V _{DD}) 3.3V Option	V	3.135	3.3	3.465	Available with AT-Cut Fundamental and PLL.
Current (I _{DD}) 2.5V Option	mA			70	
Current (I _{DD}) 3.3V Option	mA			80	
Current Voltage (V _C) 2.5V Option	V	0.2		2.3	
Current Voltage (V _C) 3.3V Option	V	0.3		3.0	
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 HIGH Level (V _{OH})	V	V _{DD} -1.025			
Output Logic LOW Level (V _{OL})	V			V _{DD} -1.620	
Rise (T _R) And Fall (T _F) Time	ns		0.5	1	Measured at 20% to 80% of Waveform.
Symmetry (Duty Cycle)	%	45	50	55	
Tri-State Input Voltage - Enable	V	0.7*V _{DD}			No Connection
Tri-State Input Voltage - Disable	V			0.3*V _{DD}	
Start-Up Time	ms			10	
Phase Jitter (12KHz ~ 20MHz)	ps		0.4	1	AT-Cut Fundamental
Phase Jitter (12KHz ~ 20MHz)	ps		3	5	PLL (Phase Lock Loop)

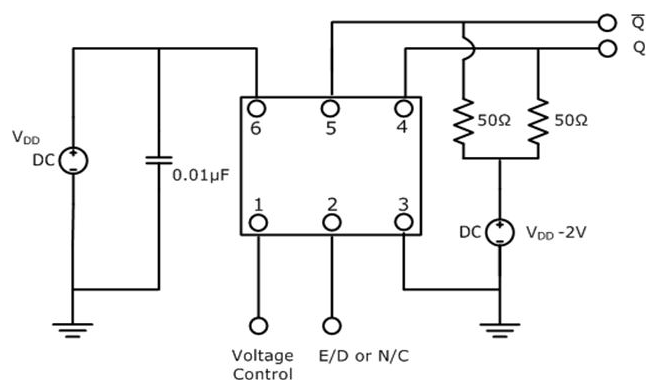
Outline Drawing & Land Pattern

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

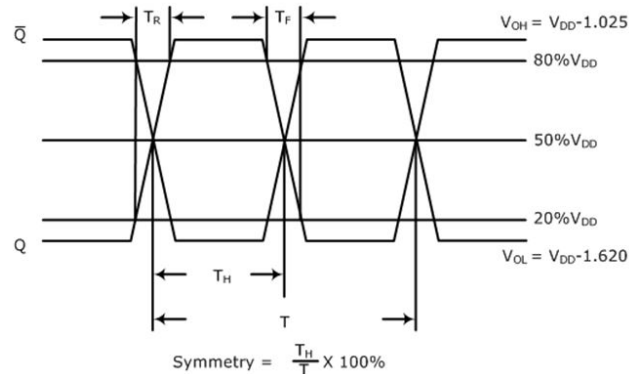


PIN	FUNCTION
1	VOLTAGE CONTROL
2	TRI-STATE or NC
3	GND
4	OUTPUT
5	COMP OUTPUT
6	V _{DD}

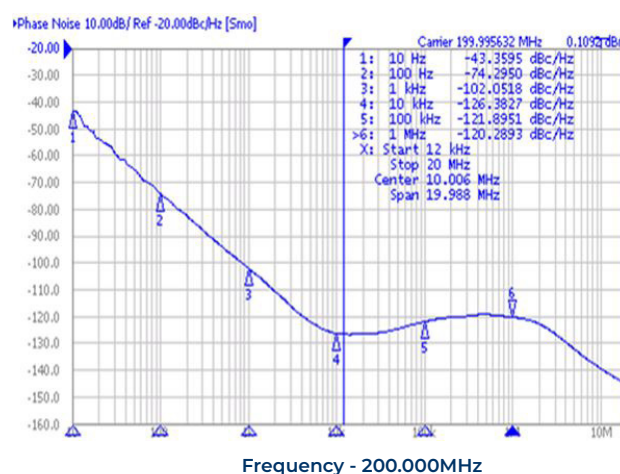
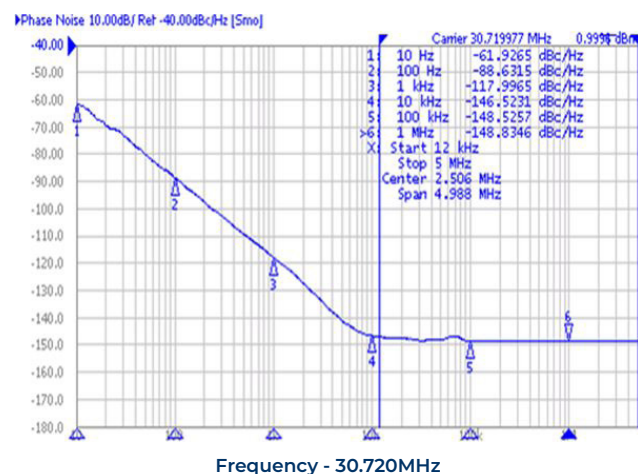
Test Circuit (LVPECL)



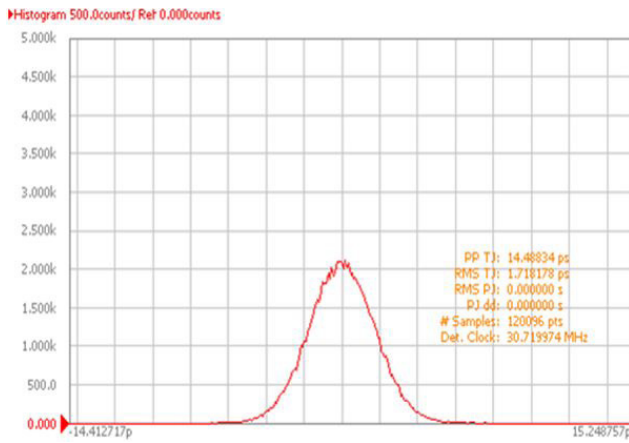
Waveform (LVPECL)



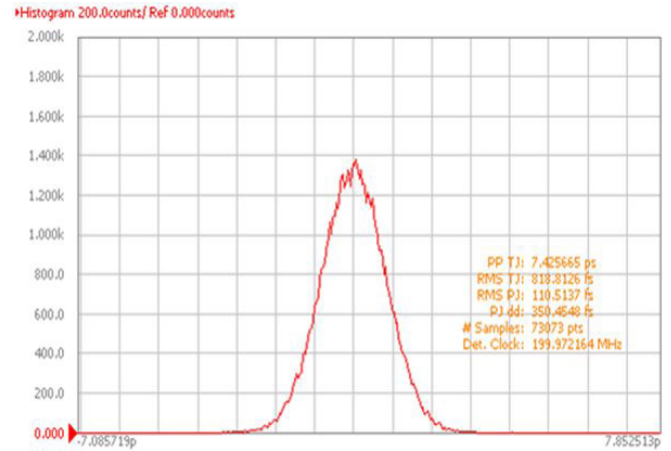
Typical Phase Noise Performance (Measured By Agilent E5052A)



Typical Jitter Performance (Measured By Agilent E5052A)

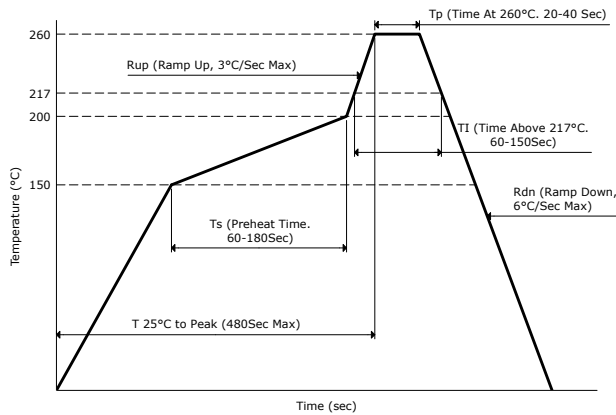


Frequency - 30.720MHz

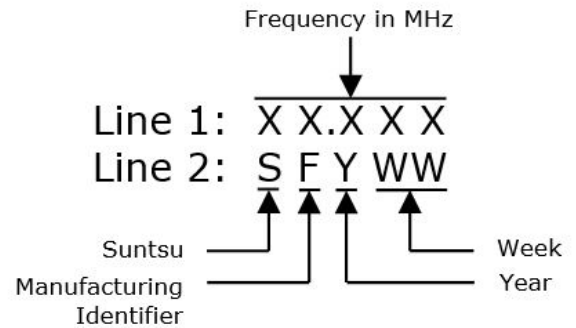


Frequency - 200.000MHz

Reflow Profile



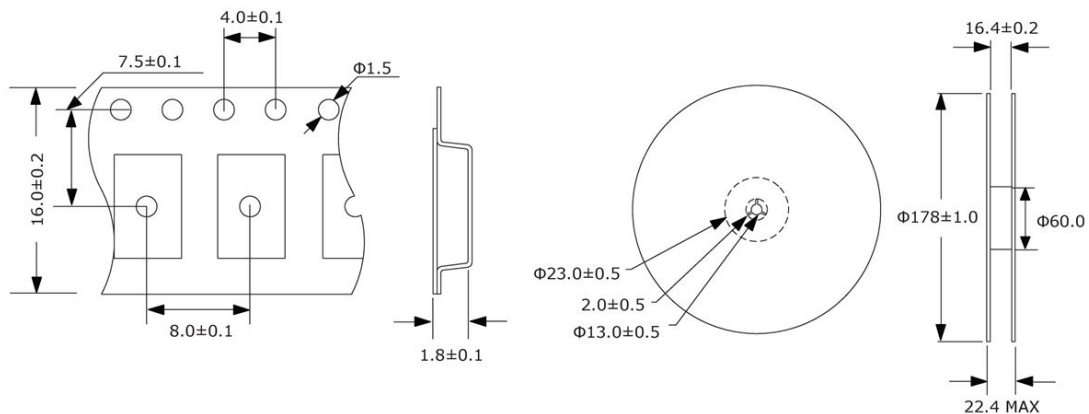
Part Marking



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