SUNTSU

FR4 PCB SMT 6 Pad CMOS OCXO

SOC15C Series

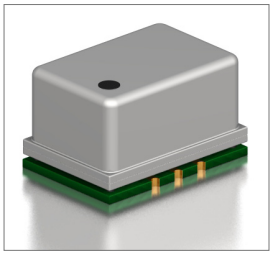
15.4mm x 10.6mm

Features

- ±5ppb (Frequency Stability) Available
- CMOS
- OCXO
- Small Package

Applications

- Military Communication Equipment
- Base Stations
- Test Equipment
- Synthesizers
- Digital Switching



Part Numbering Guide

SOC 15 C 03 K 15 - 10.000M

- SUNTSU OCXO
- 15.4mm x 10.6mm
- CMOS
- SUPPLY VOLTAGE
  - 03 : 3.3V±5%
  - 05 : 5.0V±5%
- FREQUENCY STABILITY
  - K : ±50ppb
  - L : ±30ppb
  - M : ±20ppb
  - N : ±10ppb
  - O : ±5ppb
- OPERATING TEMPERATURE RANGE
  - 05 : 0°C - +50°C
  - 15 : -10°C - +55°C
  - 27 : -20°C - +70°C
  - 38 : -30°C - +85°C
  - 48 : -40°C - +85°C
- FREQUENCY
  - MHz

RoHS COMPLIANT

Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	10		20	
Frequency Tolerance at +25°C	ppm	-0.2		+0.2	
Freq. Stability vs. Op Temp.	ppb	-5		+5	See part numbering guide for options.
Freq. Stability vs. Supply Voltage	ppb	-2		+2	V_{DD} ±5% Change
Freq. Stability vs. Load	ppb	-2		+2	±5% Change
Freq. Stability vs. Aging/Day	ppb	-1		+1	
Freq. Stability vs. Aging/Year	ppm	-0.1		+0.1	
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature	°C	-55		+105	
Supply Voltage (V_{DD}) - 3.3V Option	V	3.13	3.3	3.47	
Supply Voltage (V_{DD}) - 5.0V Option	V	4.75	5.0	5.25	
Power Consumption At Turn On	mA			700	
Power Consumption At 25°C	mA			300	
Output Logic (CMOS)	pF			15	
Output Logic Level - High (V_{OH})	V	2.4			
Output Logic Level - Low (V_{OL})	V			0.4	
Rise Time (T_R) And Fall Time (T_F)	ns			10	
Symmetry (Duty Cycle)	%	45	50	55	
Start-Up Time	ms			3	
Warm-Up Time	Mins		3		
Phase Noise (Typical) 10Hz Offset	dBc/Hz		-105	-95	
Phase Noise (Typical) 100Hz Offset	dBc/Hz		-130	-120	
Phase Noise (Typical) 1kHz Offset	dBc/Hz		-150	-140	
Phase Noise (Typical) 10kHz Offset	dBc/Hz		-150	-145	
Phase Noise (Typical) 100kHz Offset	dBc/Hz		-155	-150	
Phase Noise (Typical) 1MHz Offset	dBc/Hz		-155	-150	

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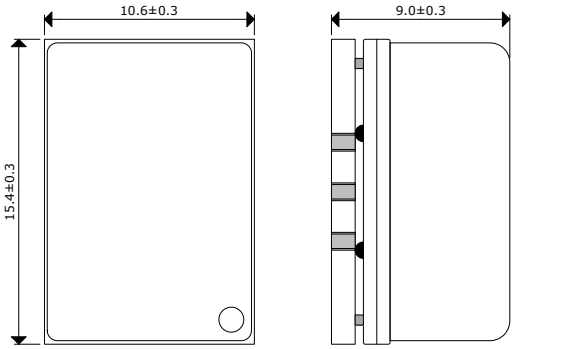
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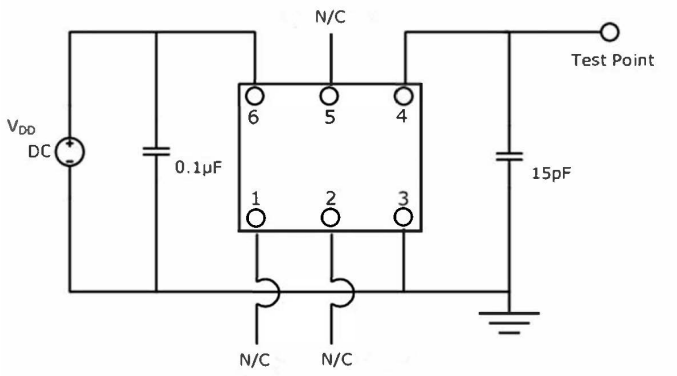
Outline Drawing & Land Pattern

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

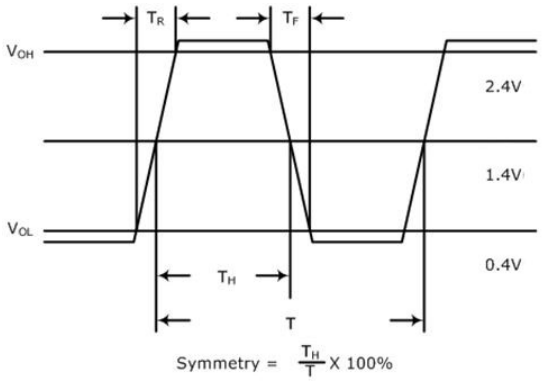


Pin#	Function
1	NC
2	NC
3	GND
4	RF Output
5	NC
6	Supply Voltage

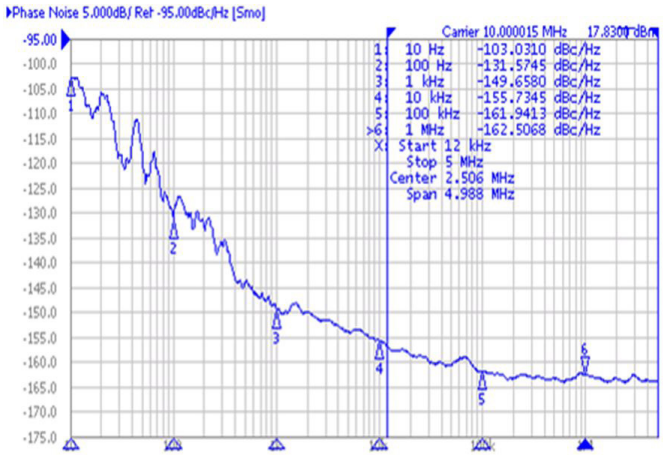
Test Circuit (CMOS)

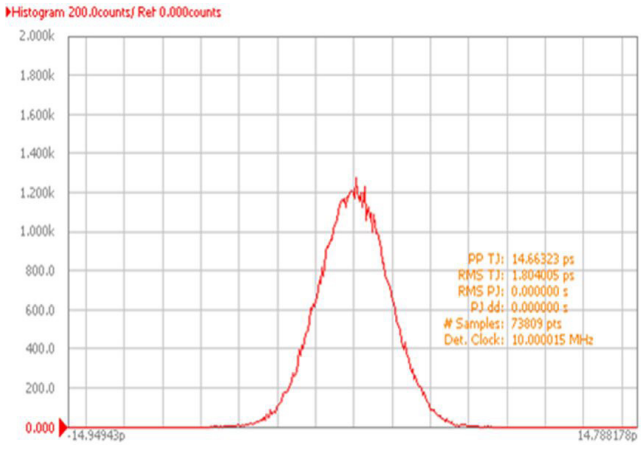


Waveform (CMOS)



Typical Phase Noise And Jitter Performance (Measured By Agilent E5052A)





Frequency - 10.000MHz

www.suntsu.com

Specifications are subject to change without notice.

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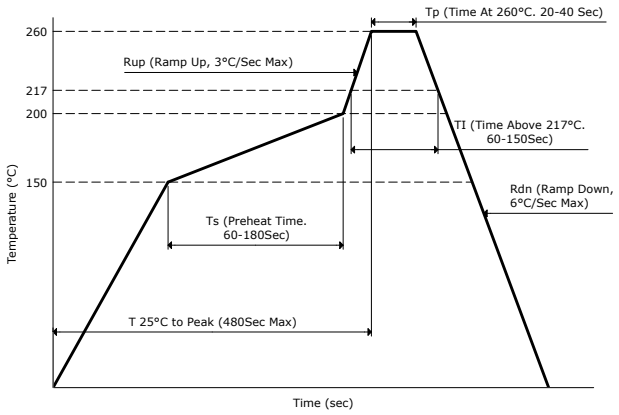
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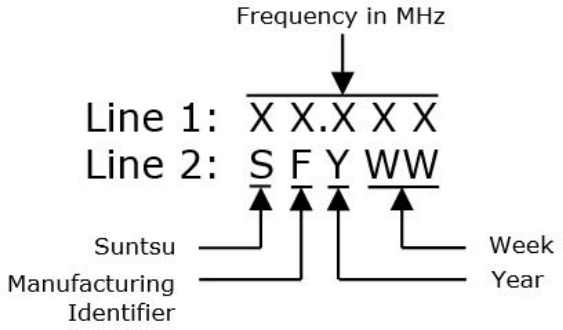
SOC15C Series

15.4mm x 10.6mm

Reflow Profile



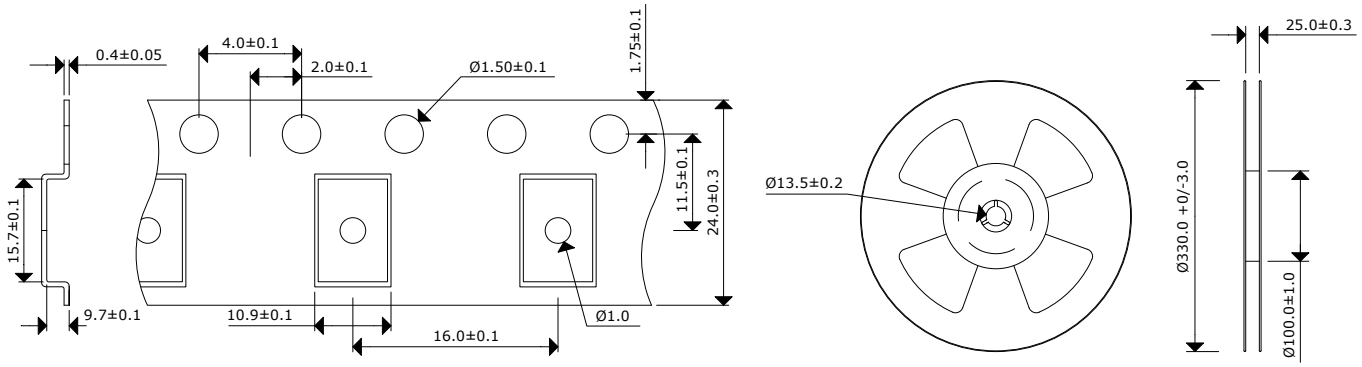
Part Marking



Tape And Reel Dimensions

350pcs/Reel

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



Environmental & Mechanical Specifications

Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition B
Lead Integrity	MIL-STD-883, Method 2004	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition A
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215
Vibration	Test Condition: 0.75 ;acceleration:10g;10Hz-500Hz, one cycle per 30min, test 2 hour. (3 times for each of the 3 directions X, Y& Z) IEC 68-2-06 Test FC		

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