SUNTSU

FR4 PCB SMT 7 Pad HCMOS OCXO

SJX239

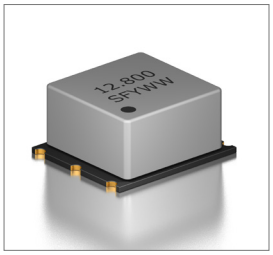
25.4mm x 22.0mm

Features

- Stratum 3E
- ±0.01ppm Stability
- 12.800MHz
- Tape & Reel
- MSL : Level 3

Applications

- Si5348/83/84/88/89 Network Synchronizer Clocks
- Si5371/72 Coherent Optics Clocks
- Si5392-97 Jitter Cleaners



Part Numbering Guide

SJX239 - 12.800M

RoHS COMPLIANT

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency	MHz		12.800		
Frequency Tolerance at +25°C	ppm	-0.5		+0.5	
Freq. Stability vs. Op Temp.	ppm	-0.01		+0.01	Ref. to Freq. observed with $f_{ref}=(f_{max}+f_{min})/2$
Freq. Stability vs. Supply Voltage	ppb	-0.5		+0.5	V_{DD} ±5% Change
Freq. Stability vs. Load	ppb	-0.5		+0.5	±5% Change
Freq. Stability vs. Aging/Day	ppb	-0.3		+0.3	
Freq. Stability vs. Aging/Year	ppm	-0.05		+0.05	
Freq. Stability vs. Aging/10 Year	ppm	-0.5		+0.5	
Holdover 24Hrs Drift	ppb	-0.5		+0.5	After 30 days of operation
Operating Temperature	°C	-40		+85	
Storage Temperature	°C	-55		+105	
Supply Voltage (V_{DD}) - 3.3V	V	3.13	3.3	3.47	
Power Consumption At Turn On	mA			1000	
Power Consumption At 25°C	mA			450	
Output Logic (HCMOS)	pF		15		
Output Logic Level - High (V_{OH})	V	2.4			
Output Logic Level - Low (V_{OL})	V			0.33	
Rise Time (T_R) And Fall Time (T_F)	ns			5	
Symmetry (Duty Cycle)	%	45	50	55	
Start-Up Time	ms			3	
Warm-Up Time	Mins			5	Freq. @25°C reference after 1hr
Phase Noise 1Hz Offset	dBc/Hz		-90	-80	
Phase Noise 10Hz Offset	dBc/Hz		-120	-110	
Phase Noise 100Hz Offset	dBc/Hz		-140	-130	
Phase Noise 1kHz Offset	dBc/Hz		-145	-140	
Phase Noise 10kHz Offset	dBc/Hz		-150	-145	
Phase Noise 100kHz Offset	dBc/Hz		-150	-145	
Phase Noise 1MHz Offset	dBc/Hz		-150	-145	
Phase Jitter 12kHz - 5MHz	ps			0.5	

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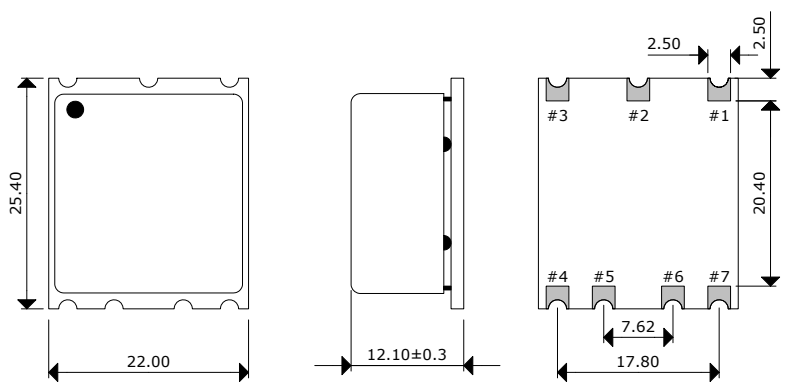
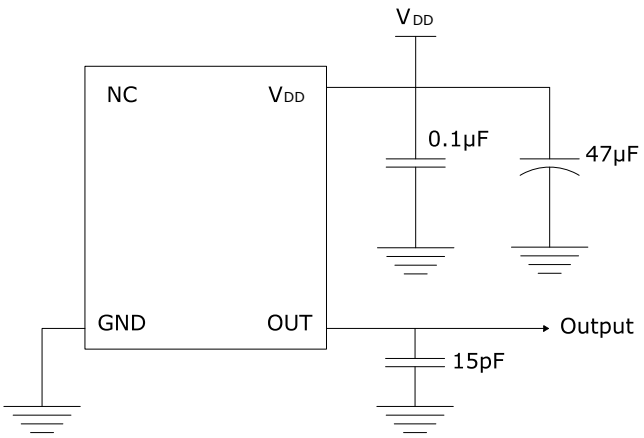
Outline Drawing & Land Pattern

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

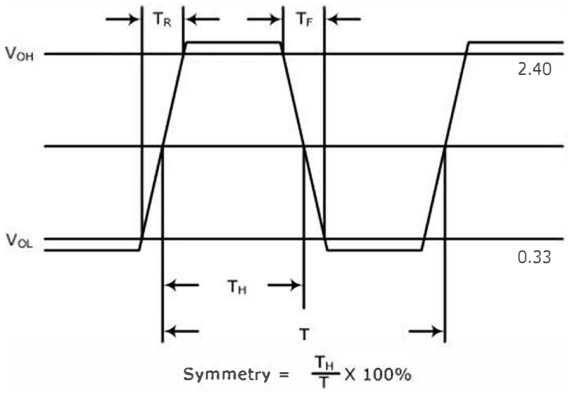


Pin#	Function
1	NC
2	NC
3	V_{DD}
4	OUTPUT
5 & 6	NC
7	GND

Test Circuit (HCMOS)

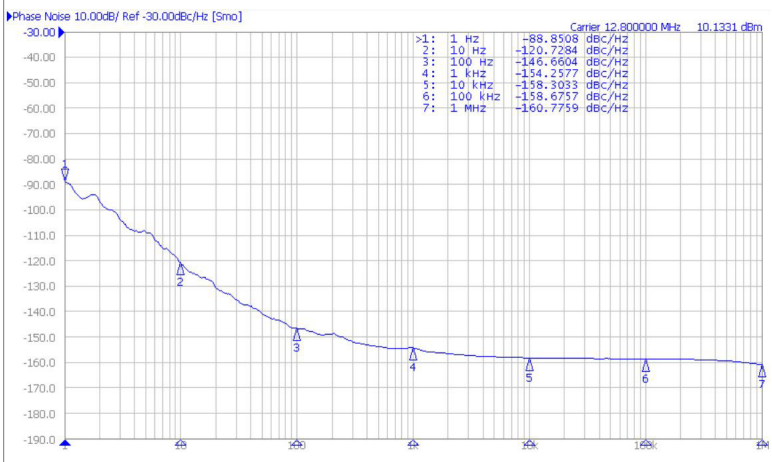


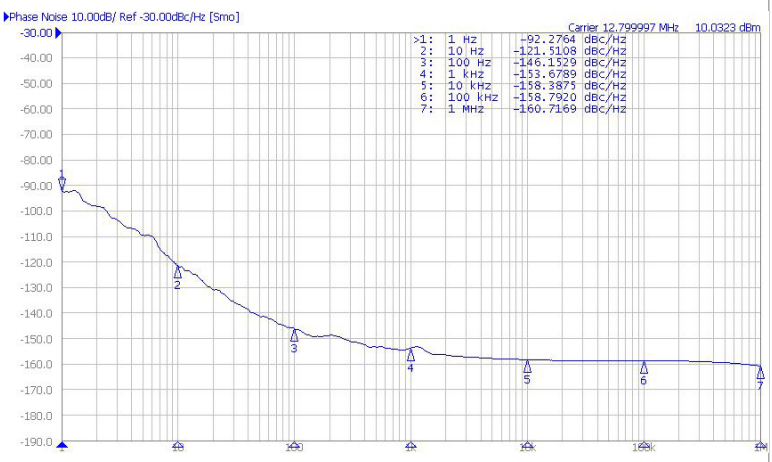
Waveform (HCMOS)



Symmetry = $\frac{T_H}{T}$ X 100%

Typical Phase Noise And Jitter Performance (Measured By Agilent E5052B)





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Specifications are subject to change without notice.

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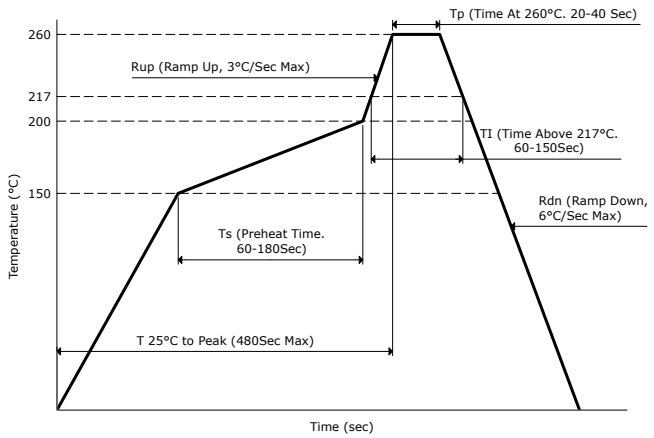
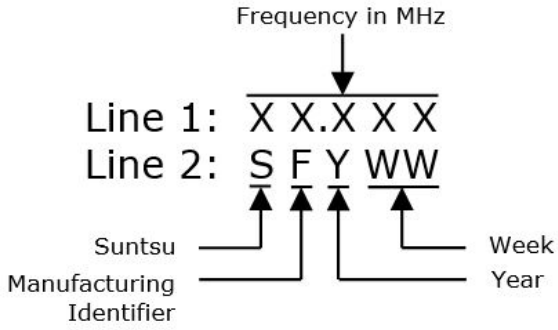
Reflow Profile

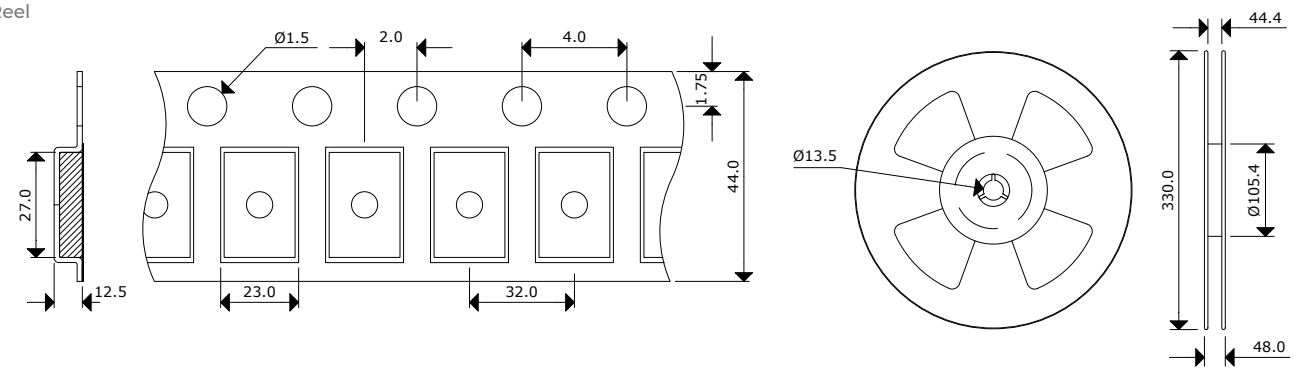


Part Marking



Tape And Reel Dimensions

350pcs/Reel



Environmental & Mechanical Specifications

Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	50g;11ms; ½sine wave (directions X,Y,Z) IEC68-2-27 Test Ea/Severity 50A
Lead Integrity	MIL-STD-883, Method 2004	Resistance to Soldering	MIL-STD-202, Method 210, Condition A
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215
Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz-500Hz, one cycle per 30 min, test 2hrs. (3 times for each 3 directions X ,Y , Z), IEC 68-2-06 Test Fc.		

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