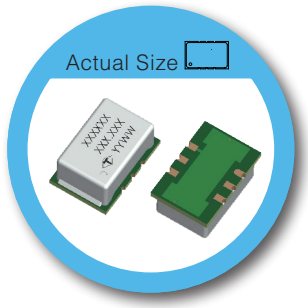
TAITIEN
Our Performance, Your Reputation

TK Type High Frequency, High Stability, Very Low Noise

14 x 9 mm SMD Voltage Controlled Temperature Compensated Crystal Oscillator



RoHS Compliant

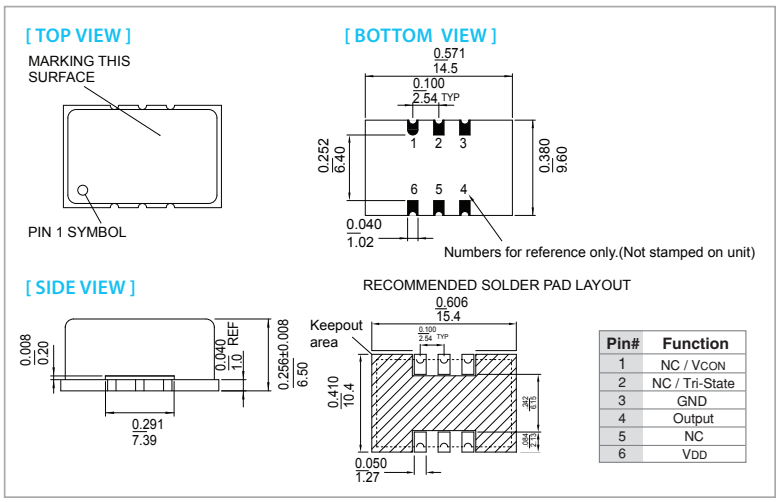
FEATURE

- Low Phase Noise
- High Stability for Stratum 3
- Small SMD Package

TYPICAL APPLICATION

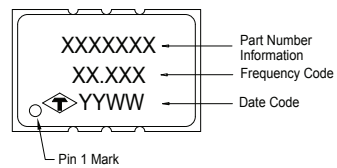
- Time Synchronization
- Microwave Communication
- Test & Measurement
- Telecom Systems
- Satellite Communication

DIMENSION (mm)



Pin#	Function
1	NC / VCON
2	NC / Tri-State
3	GND
4	Output
5	NC
6	VDD

IDENTIFICATION PRODUCT MARKING



ELECTRICAL SPECIFICATION OUTPUT (PIN = "R.F. OUTPUT")

Parameter		Min.	Typ.	Max.	Unit	Test Condition
Frequency (Fo)		40		150	MHz	Standard Frequency : 50M, 92.16M, 98.304M, 100M, 120MHz
Frequency Stability(Overall)		-4.6		+4.6	ppm	Frequency stability includes frequency tolerance@25℃ and frequency stability vs. operating temperature range and voltage variance and 20 years aging.
Holdover		-0.37		+0.37	ppm	Over 24 Hours
Initial Tolerance		-1.0		+1.0	ppm	at 25℃
Operating Temperature Range		-40℃ ~ +85℃			℃	
Storage Temperature Range		-40℃ ~ +105℃			℃	
Waveform		Sine wave				
Level			+8		dBm	
Load			50		Ω	
Harmonics				-30	dBc	
Waveform		CMOS				
Output Level	Output High	2.97			V	
	Output Low			0.33		
	Duty Cycle	45		55	%	
Rise/Fall Time				3	nSec.	
Load			15		pF	
Phase Noise (Max.)						
Control Voltage Range (VCTCXO)		0.5	-	2.5	V	
Pulling Range (VCTCXO)		±5.0	-		ppm	
Vc Input Impedance (VCTCXO)		100	-		kΩ	
Phase Noise (Max.)				-87	dBc/Hz	@ 10Hz
				-117	dBc/Hz	@ 100Hz
				-141	dBc/Hz	@ 1KHz
				-148	dBc/Hz	@ 10KHz
				-155	dBc/Hz	@ 100KHz
				-160	dBc/Hz	@ 1MKHz

Note: not all combination of options are available. Other specifications may be available upon request.

INPUT POWER (PIN = VDD)

Parameter	Min.	Typ.	Max.	Unit	Test Condition
Voltage		+3.3		V	
Current			35	mA	At maximum supply voltage

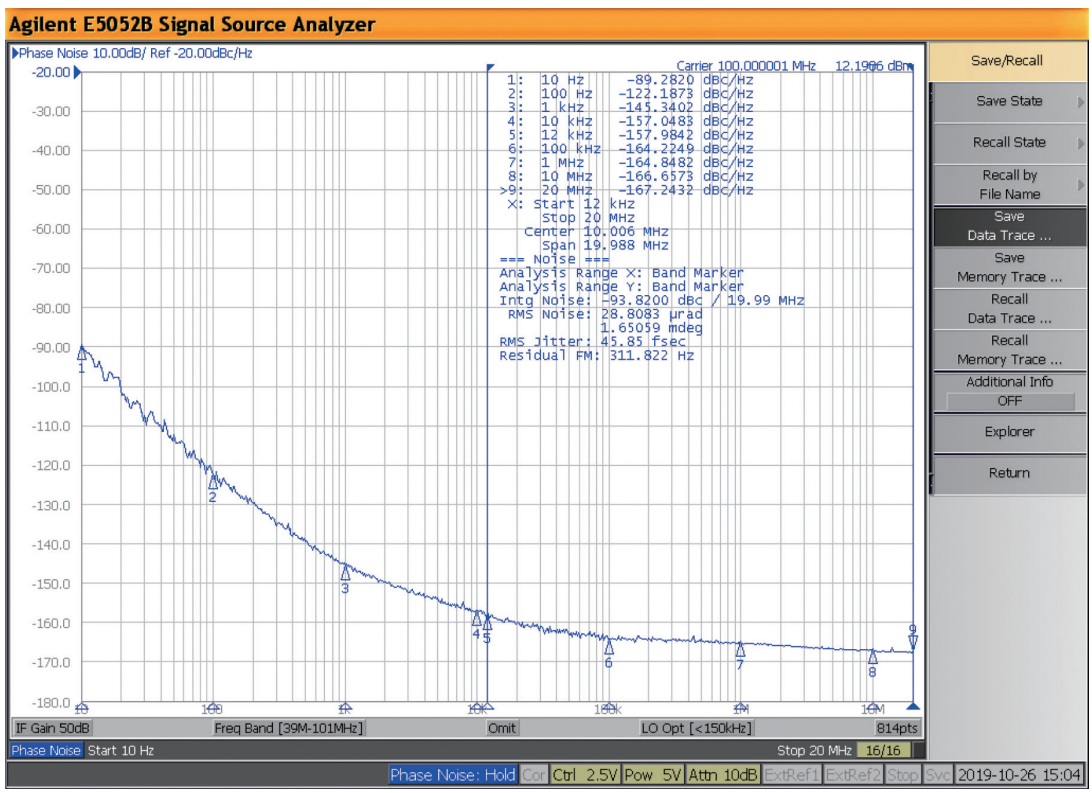
ENVIRONMENTAL

Parameter	Reference Std.	Test Condition
Vibration Test	MIL-STD-883 2007 Condition A JESD22-B103 Condition 1	10~2000Hz, 1.52mm, 20G, each axis for 4 hrs
Thermal Shock	MIL-STD-883 1010 Condition B JESD22-A104 Condition B	-55°C, 125°C; soak time is 10 mins, with total 200 cycles
Mechanical Shock	MIL-STD-883 2002 Condition B JESD22-B104 Condition B	1500G, half-sine, 0.5ms, each axis for 3 times.

ORDERING INFORMATION

TKETTLJTNF-Frequency

PHASE NOISE TEST DATA



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