

**FEATURE**

The SMK2013OCAI is from the world's first

ASIC-based OCXO product family and utilizes Rakon's patented Mercury™ ASIC technology. It delivers

Features

Frequency stability over temperature as low as

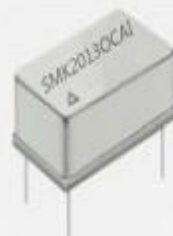
±10ppb over -20 to 70°C

Low power consumption

High reliability

Specification for electrical appliances

20.5*13.0*8.5mm



Parameter	5.0V		3.3V		Unit
	MIN	MAX	MIN	MAX	
Supply Voltage(VDD) 5%	4.75	5.25	3.135	3.465	V
Frequency Range	5	50	5	50	MHz
Standard Frequency	10, 12.8, 19.2, 19.44, 20, 24.576, 25, 26, 32.768, 30.72, 40, 48.88				
Frequency Tolerance*	±10-±100		±10-±100		ppb
Vs Load (±10%) change	±10		±10		ppb
Vs Aging	±10		±10		
Input power	800~1000		800~1000		mW
	350~400		350~400		mW
Output Level (CMOS)					
Output voltage level high (VOH)	10% Vcc		10% Vcc		V
Output voltage level high (VOL)	90% Vcc		90% Vcc		
Duty cycle	45	55	45	55	%
Rise and fall times	4		4		ns
Port input impedance	80		80		kΩ
Modulation bandwidth	3.5		3.55		kHz
Slope	8		8		ppm/V
Phase Noise					
10Hz	-95		-95		dBc/Hz
100Hz	-125		-125		
1KHz	-145		-145		
10KHz	-155		-155		
Start Time	2		2		mSec
Operating temperature range	-40	85	-40	85	°C

EMAIL:info@cimake.net

TEL: +0755-26906691

HP:13164746831

B211, Wuhan University Industry-University-Research Cooperation, Yuexing Second Road, Science and Technology Park, Yuehai Street, Nanshan District, Shenzhen



10.00MHz SMK2013OCAI ocxo ssp phase noise

Frequency Range	Temp Range	Stability	Output Waveform	Supply Current
5.00 to 50.000MHz	(0 to 50 °C)	±0.30ppm	HCMOS	/
	(-20 to 70 °C)	±0.30ppm		/
	(-30 to 75 °C)	±0.30ppm		/
	(-40 to 85 °C)	±0.30ppm		/

Environmental Parameters

Storage Temperature Range: -50 to 90 °C

Frequency stability over temperature in still air

Shock: IEC 60068-2-27, Test Ea: 1500G acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes

Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz, 1.5mm displacement, 60-2000Hz at 98.1m/s², 30mins in 3 mutually perpendicular planes at 1 oct/min

Solderability: MIL-STD-202, Method 208, Category 3

Frequency*

Model*

Reference Voltage + Frequency Adjustment Options*

Output

Frequency Stability (over operating temperature range)*

Operating Temperature Range*

Supply Voltage

(*minimum required)

DIMENSION (mm)

