



## FEATURE

The SMK20200CAI OCXO is the cost effective highly stable oscillator for telecom applications.

Frequencies available are from 5MHz to 500MHz, and power supply options are 3.3V, 5V & 12V.

These 20 x 20 mm package series of oscillators are designed with an embedded post-compensation system with a micro-controller.

## APPLICATION

Sync E modules

Stratum 3E timing modules

Time and frequency references

Tests equipment

20\*20\*8mm



## Specification for electrical appliances

Parameter	12.0V		Unit
	MIN	MAX	
Supply Voltage (VDD) 5%	11.4	12.6	V
Frequency Range	5	500	MHz
Standard Frequency	100.000000		
Frequency Tolerance*	±0.1		ppm
Output waveform	Sine		
Vs Load (12V±5%) change@25°C	±5.0		ppb
Load Variation @50 Ω ±5%	±5.0		ppb
Ageing (first year)	±0.10		ppm
Temperature Stability (-40°C~+85°C)	±0.10		ppm
Short Tem Stability ( in still air)	0.05		ppb/s
power consumption (during warm up)	3.0		W
power consumption (at steady state)	1.5		W
control voltage (Nominal=2.5v)	0 to 5.0		V
frequency control range (0Vdc)	-0.50		ppm
frequency control range (5Vdc)	0.50		ppm
Linearity	10		%
Harmonics level	-35		dBc
Spurious level	-75		dBc
Input impedance	100		k Ω
Operating temperature range	-40	85	° C



100.00MHz SMK20200CAI ocxo ssp phase noise

Phase Noise		Unit
10Hz	-110	dBc/Hz
100Hz	-140	
1KHz	-170	
10KHz	-180	
100KHz	-185	

### Environmental Parameters

Storage Temperature Range: -55 to 90° C

Frequency stability over temperature in still air

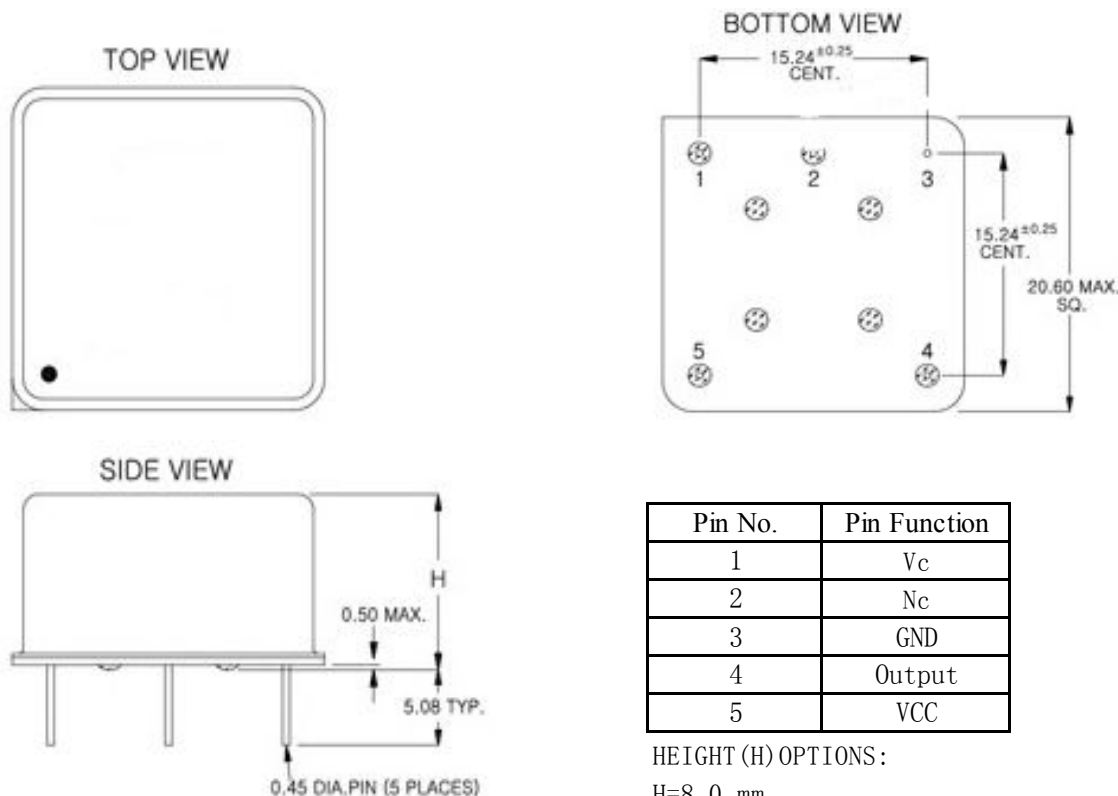
Shock: IEC 60068-2-27, Test Ea: 1500G acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes

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

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

### DIMENSION (mm)

### Mechanical Dimensions



Pin No.	Pin Function
1	Vc
2	Nc
3	GND
4	Output
5	VCC

HEIGHT (H) OPTIONS :

H=8.0 mm

H=10.0mm