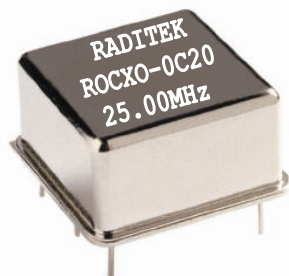


RADITEK INC.

OVEN CONTROLLED CRYSTAL OSCILLATORS

code-w



ROCXO-OC20 SERIES

- Stability up to $\pm 0.05 \times 10^{-6}$
- Low Aging
- Compact Package
- PCS Base Stations
- Cellular Base Stations
- Synthesizer
- Measurement Equipment
- Digital Switching

Performance Characteristics

Parameter			OC20					
Frequency Range		F ₀	1.000MHz~100.000MHz					
Standard Frequency(MHz)		F ₀	4.096	5	8.192	10	16.384	20
Frequency Accuracy			±0.1PPM (center control voltage)					
Supply Voltage		V _{DD}	B: +5.0VDC±10%			C: +12.0VDC±10%		
Supply	Warming State		3.6W Max					
Consumption	Steady State		1.5W Max (at 25°C)					
Output Load			A: TTL 15pF B: TTL 50pF		C: CMOS 15pF D: CMOS 50pF		G: Sine Wave	
Output Duty			45%~55%				—	
Control Voltage Range			See Ordering Information					
Frequency Stability	Temperature Range		±2×10 ⁻⁷ (reference to frequency at 25°C V _{DD} ±5%)					
	Power Supply		±5×10 ⁻⁹ (V _{DD} ±5%)					
	Load		±5×10 ⁻⁹ (5% change from 50Ω)					
Vs	Warm up Time		<7min (to be within ±10 ⁻⁸ ×F ₀ , F ₀ Refers to Frequency after 1h operation)					
Rise Time/Fall Time		Tr/Tf	10nS Max				—	
Output	"0"Level	V _{OL}	0.4V Max		10% V _{DD}		>0dBm//50Ω	
Level	"1"Level	V _{OH}	2.4V Min		90% V _{DD}			
Storage Temperature Range			T _{STG}		-40°C~+100°C			
Aging (After 30 days, at+25°C)			B: ±5×10 ⁻⁹ /day / ±5×10 ⁻⁷ /year / ±3×10 ⁻⁶ /10 year C: ±1×10 ⁻⁹ /day / ±1×10 ⁻⁷ /year / ±1×10 ⁻⁶ /10 year					
Phase Noise (at 10MHz)			1Hz	10Hz	100Hz	1KHz	10KHz	
			-80dBc/Hz	-120dBc/Hz	-140dBc/Hz	-145dBc/Hz	-150dBc/Hz	
Internal Reference Voltage			4V±0.08(V _{DD} =5V)			8V±0.16(V _{DD} =12V)		
Slope and Linearity			Positive / ±10%					

Frequency Stability Over Temperature Range

Temperature Range	Frequency Stability				
	D: $\pm 5 \times 10^{-8}$	E: $\pm 1 \times 10^{-7}$	F: $\pm 2 \times 10^{-7}$	G: $\pm 3 \times 10^{-7}$	H: $\pm 5 \times 10^{-7}$
A: 0°C~+50°C	●	●	●	●	●
B: -10°C~+60°C		●	●	●	●
C: -20°C~+70°C		●	●	●	●
E: -40°C~+75°C				●	●

ROCXO-OC20 Series-w

Specifications may be subject to change

10/10/06

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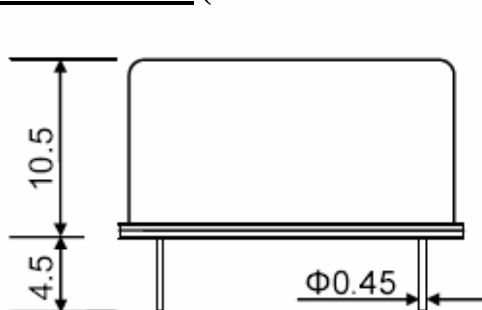
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OVEN CONTROLLED CRYSTAL OSCILLATORS

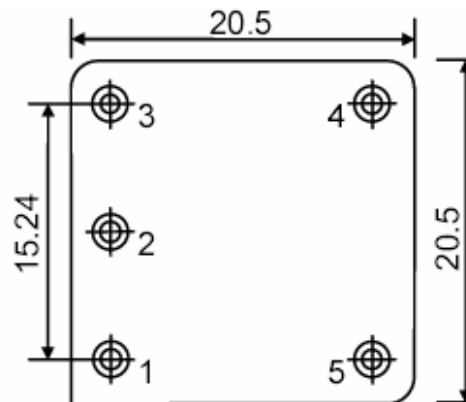
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ROC XO-OC20 SERIES

OUTLINE DRAWING (units in mm – not to scale)



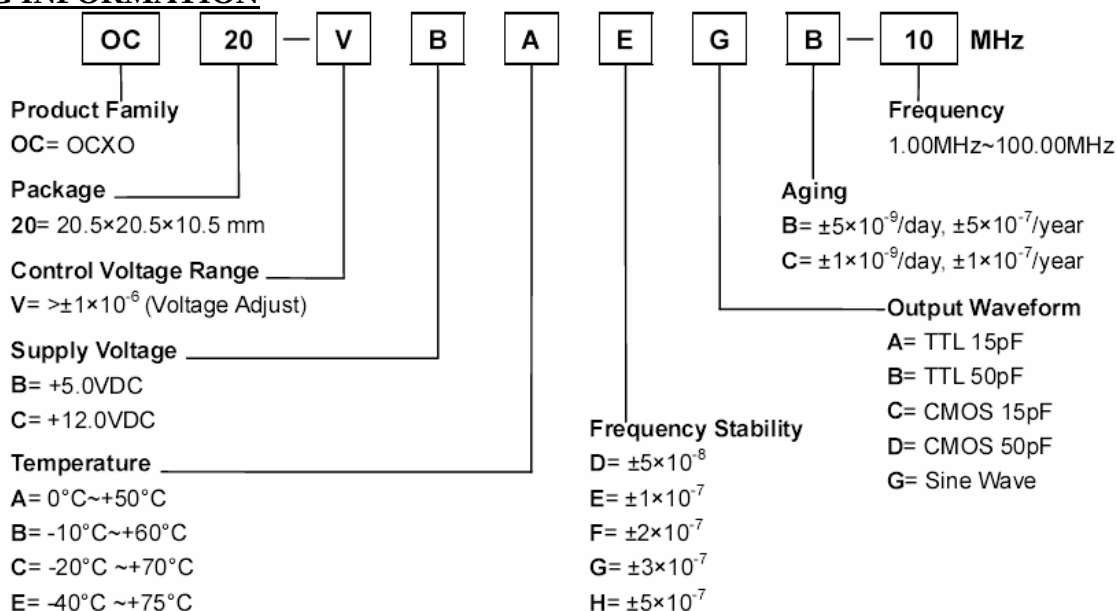
(Side View)



(Bottom View)

PIN	FUNCTION
#1	+DC
#2	Output
#3	GND
#4	Control Voltage
#5	Reference Voltage/NC

ORDERING INFORMATION



ORDERING EXAMPLE

OC20-VBAEGB-10MHz

OCXO / $\geq \pm 1 \times 10^{-6}$ (Voltage Adjust) / +5.0VDC / 0°C~+50°C / $\pm 1 \times 10^{-7}$ / Sine Wave / $\pm 5 \times 10^{-9}$ /day, $\pm 5 \times 10^{-7}$ /year / 10MHz

ROC XO-OC20 Series-w

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