


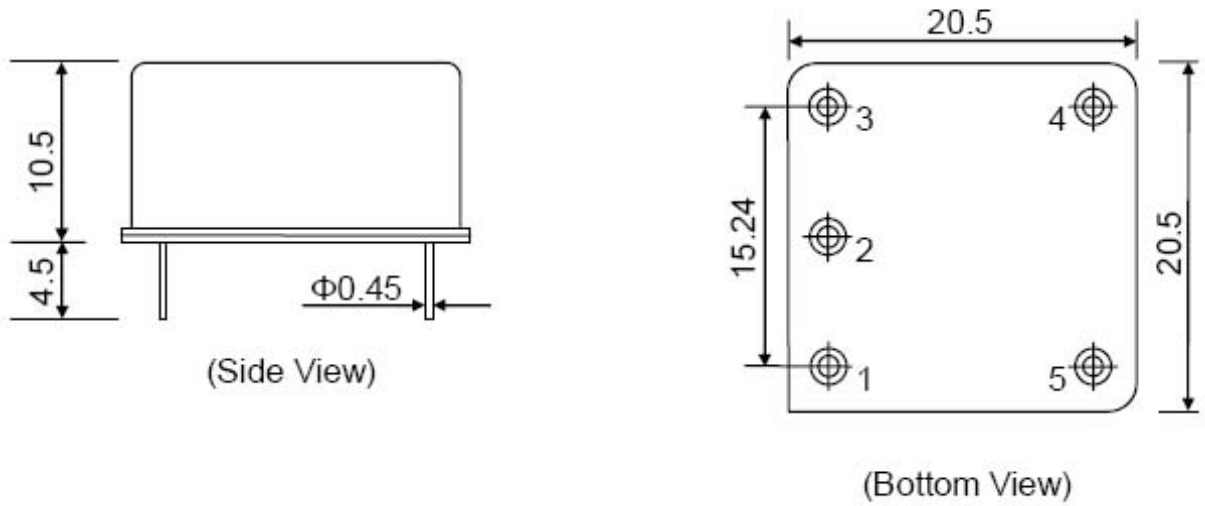
Crystal Oscillator Series	Stability up to $\pm 0.05 \times 10^{-6}$ Low Aging Compact Package	PCS Base Stations Cellular Base Stations Synthesizer Measure Equipment Digital Switching	
OC-20			

### Electrical Specifications

Parameter		OC20				
Frequency Fo	Range	1.000 MHz~100.000 MHz				
Standard Frequency (MHz) Fo		4.096	5	8.192	10	16.384 20
Frequency Accuracy		$\pm 0.1\text{PPM}$ (center control voltage)				
Supply Voltage VDD		B:+5.0VDC $\pm 10\%$			C:+12.0VDC $\pm 10\%$	
Supply Consumption	Warming State	3.6W Max				
	Steady State	1.5W Max (at 25 )				
Output Load		A: TTL 15pF B: TTL 50pF	C: CMOS 15pF D: CMOS 50pF		G: Sine Wave	
Output Duty		45%~55%			—	
Control Voltage Range		M= $\pm 1 \times 10^{-6}$ (Machine Adjust)				
		V= $\pm 1 \times 10^{-6}$ (Voltage Adjust)				
Frequency Stability Vs	Temperature Range	$\pm 2 \times 10^{-7}$ (reference to frequency at 25 VDD $\pm 5\%$ )				
	Power Supply	$\pm 5 \times 10^{-9}$ (VDD $\pm 5\%$ )				
	Load	$\pm 5 \times 10^{-9}$ (5% change from 50 )				
	Warm up Time	< 7min (to be within $\pm 10^{-8} \times \text{Fo}$ , Fo Refers to Frequency after 1h operation)				
Rise Time/Fail Time	Tr/Tf	10nS Max			—	
Output Level	“0”Level VOL	0.4V Max	10%VDD		> 0dBm//50	
	“1”Level VCH	2.4V Min	90%VDD			
Storage Temperature Range TSTG		-40 ~+100				
Aging (After 30 days ,at+25 )		B: $\pm 5 \times 10^{-9}$ /day / $\pm 5 \times 10^{-7}$ /year / $\pm 3 \times 10^{-6}$ /10 year C: $\pm 1 \times 10^{-9}$ /day / $\pm 1 \times 10^{-7}$ /year / $\pm 1 \times 10^{-6}$ /10 year				
Phase Noise (at 10MHz)		1 Hz	10Hz	100Hz	1KHz	10KHz
		-80dBc/Hz	-100dBc/Hz	-120dBc/Hz	-135dBc/Hz	-145dBc/Hz
Internal Reference Voltage						
Slope and Linearity		Positive / $\pm 10\%$				

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 ~ +50					
B:-10 ~ +60					
C:-20 ~ +70					
E:-40 ~ +75					

### Dimensions (mm)



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

### Ordering Information

O	C	Type	Output Load	xx.xxxx	M	Supply Voltage	Stability Vs.Temp	Operating Temp	Control voltage range	option
O:	OCXO	20DIP	See table	Center frequency	M	B:5V	See table	See table	See table	F:Lead Free
C:	control			10 to 100 MHz	MHz	C:12V				T:T&P Blank:Bulk
Example:OC20DIP510MBDAMF ( OCXO,DIP20,5PIN,10MHZ,B:5V,D: $\pm 5 \times 10^{-8}$ , A:0 ~ +50 , M : => $\pm 1 \times 10^{-6}$ ,Lead free Bulk )										

Guangzhou ZGC Electronic Co.Ltd.

Tel:+86-20-32068136 Fax: +86-20-32068201 E-mail:zgd@worldzgc.com [Http://www.worldzgc.com](http://www.worldzgc.com)