

XO5164 Series

14 pin DIP, 3.3 Volt, HCMOS, OCXO



- Standard DIP/DIL package offering tight stabilities, fast warm-up, and low current
- Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications
- 3.3V Operation

Ordering Information

00.0000
MHz

XO5164 A R1 -R

Product Series _____

Stability/Temperature _____

 A: ±0.075 ppm, 0°C to +60°C

 B: ±0.15 ppm, -20°C to +70°C

Frequency Adjustment Method _____

 R1: External Resistor Adjust (See Figure 1)

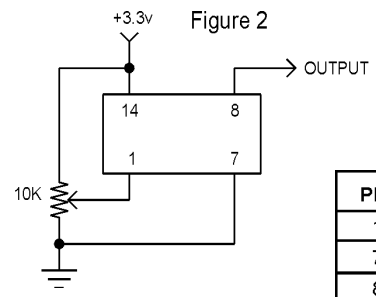
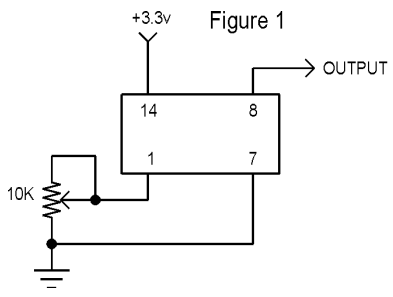
 V5: Voltage Adjust (See Figure 2)

RoHS Compliance _____

 Blank: non-RoHS compliant part

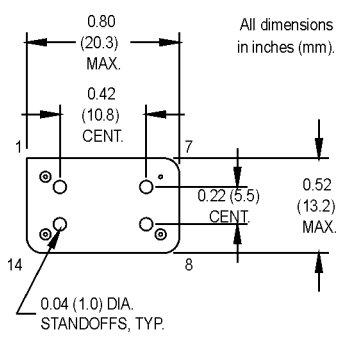
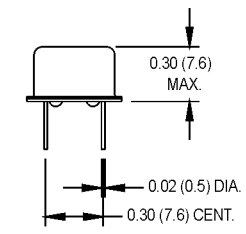
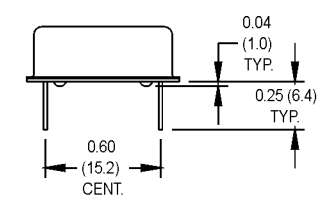
 -R: RoHS compliant part

Frequency (Customer Specified) _____



Pin Connections

PIN	FUNCTION
1	Frequency Adjust
7	Case ground & supply return
8	R.F. Output
14	Supply (+)



All dimensions in inches (mm).

PARAMETER	Symbol	Min.	Max.	Units	Condition
Frequency Range	F	10	20	MHz	
Operating Temperature	T _A	(See Ordering Information)		°C	
Stability Over Temperature	ΔF/F	(See Ordering Information)		ppm	
Short Term Stability			5 x 10 ⁻¹⁰		0.1 to 30 secs.
Aging (First Year)			±0.7	ppm	
Aging (10 Years)			±4.0	ppm	
Frequency Vs. Supply			±0.1	ppm	
Frequency Vs. Load			±0.01	ppm	
Supply Voltage	V _{cc}	+3.15	+3.45	Volts	
Warm-Up Time		To spec after 60 secs.			0°C
Warm-Up Current			250	mA	After 10 secs.
Supply Current	I _{cc}		100	mA	+30°C
			160	mA	-20°C
Output Signal		HCMOS Compatible			
Rise/Fall Time	T _r /T _f		7	ns	Ref. 10% and 90%
Logic "0" Level	V _{ol}		0.4	Volts	
Logic "1" Level	V _{oh}	V _{cc} - 0.5		Volts	
Symmetry			40/60	%	Ref. To 1/2 V _{cc}
Output Load			15 pf HCMOS 10 LS TTL		
Frequency Adjustment (Pin 1)		±4		ppm	See Figure 1 or 2
Tuning Slope		Positive			
Input Impedance (Pin 1)		4.7K		ohms	
Phase Noise					(BW = 1 Hz) Offset from carrier
1 Hz			-80	dBc/Hz	
10 Hz			-110	dBc/Hz	
100 Hz			-135	dBc/Hz	
1 kHz			-145	dBc/Hz	
Environmental	Mechanical Shock	2000 g, 0.3 mS, 1/2 sine			
	Vibration	2000 Hz, 10 g			
	Storage Temperature	-55°C to +125°C			
	Hermeticity	Per MIL-STD-202, Method 112			
	Solderability	EIAJ-STD-002			

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.