

XO5160 Series

14 pin DIP, 5.0 Volt, HCMOS/TTL, 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

Ordering Information

XO5160 A R1 -R 00.0000 MHz

Product Series _____

Stability/Temperature _____

A: ±0.075 ppm, 0°C to +60°C
 B: ±0.15 ppm, -20°C to +70°C
 C: ±0.25 ppm, -40°C to +85°C

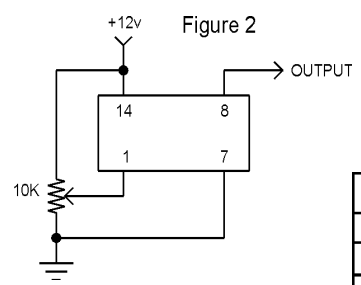
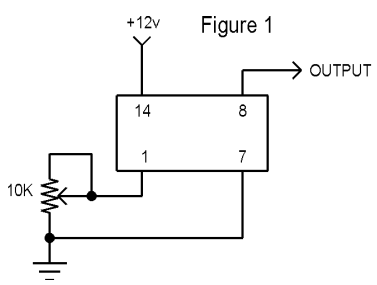
Frequency Adjustment Method: _____

R1: External Resistor Adjust (See Figure 1)
 V5: Voltage Adjust (See Figure 2)

RoHS Compliance _____

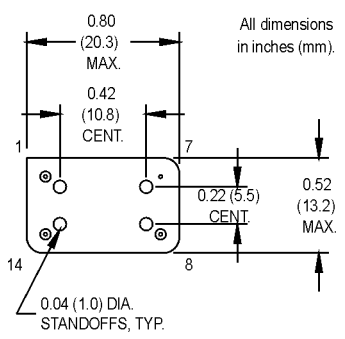
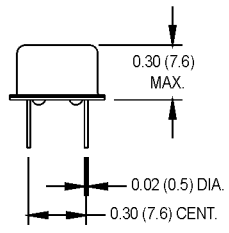
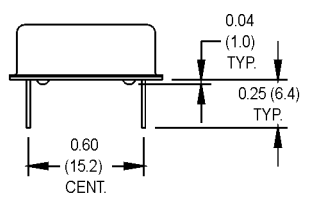
Blank: non-RoHS compliant part
 -R: RoHS compliant part

Frequency (Customer Specified) _____



Pin Connections

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



PARAMETER	Symbol	Min.	Typ.	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 ⁻¹¹		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}	+4.8		+5.2	Volts		
Warm-Up Time		To spec after 30 secs.				0°C	
Warm-Up Current				250	mA	After 10 secs.	
Supply Current	I _{cc}			70 110	mA	+30°C -20°C	
Output Signal						HCMOS/TTL 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	Sym			40/60	%	Ref. To ½ 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)		4.7 K			ohms		
Phase Noise						(BW = 1 Hz) Offset from carrier	
1 Hz			-70		dBc/Hz		
10 Hz			-100		dBc/Hz		
100 Hz			-130		dBc/Hz		
1 kHz			-140		dBc/Hz		
Environmental							
Mechanical Shock		2000 g, 0.3 mS, ½ sine					
Vibration		2000 Hz, 10 g					
Storage Temperature		-55°C to +125°C					
Hermeticity		Per MIL-STD-202, Method 112					
Solderability		EIAJ-STD-002					