

XO5165 Series

14 pin DIP, 5.0 or 3.3 Volt, HCMOS, OCXO



- Standard DIP/DIL package offering tight stabilities, fast warm-up, and low current
- Stratum 3 Application

Ordering Information

XO5165 A 5 R1 -R 00.0000 MHz

Product Series ————

Temperature Range ————

A: 0°C to +70°C

B: -20°C to +70°C

C: -40°C to +85°C

Power Supply ————

3: 3.3V ±0.15V

5: 5.0V ±0.25V

Frequency Adjustment Method ————

R1: External Resistor Adjust (See Figure 1)

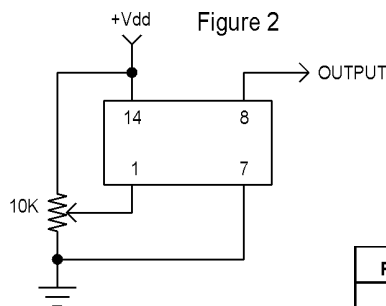
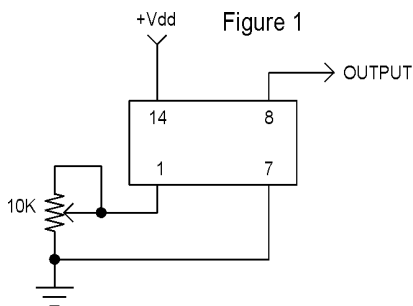
V5: Voltage Adjust (See Figure 2)

RoHS Compliance ————

Blank: non-RoHS compliant part

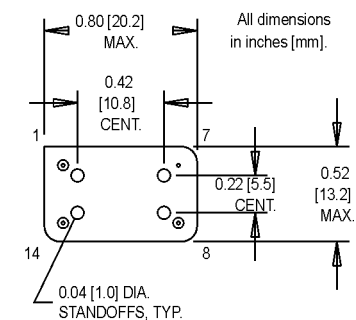
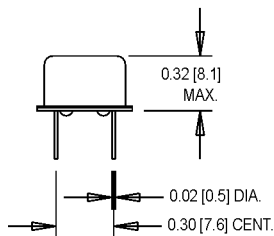
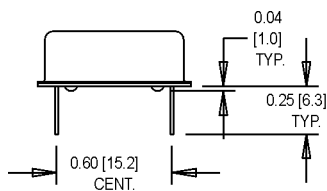
-R: RoHS compliant part

Frequency (Customer Specified) ————



Pin Connections

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



	PARAMETER	Symbol	Min.	Max.	Units	Condition
	Frequency Range	F	10	20	MHz	
	Operating Temperature	T _A	(See Ordering Information)		°C	
	Short Term Stability		5 x 10 ⁻¹⁰			0.1 to 30 secs.
	Holdover Stability			±0.28	ppm	24 hours
	Overall Stability			±4.6	ppm	15 years
	Supply Voltage	V _{dd}	(See Ordering Information)			
	Warm-Up Time		To spec after 30 secs.			0°C
	Warm-Up Current			250	mA	During first 10 secs.
	Supply Current	I _{dd}		70	mA	+30°C @ 5.0V
				110	mA	+30°C @ 3.3V
				110	mA	-20°C @ 5.0V
				160	mA	-20°C @ 3.3V
	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 _{dd} - 0.5		Volts	
	Symmetry	Sym		45/55	%	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			-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, 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.

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