

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)

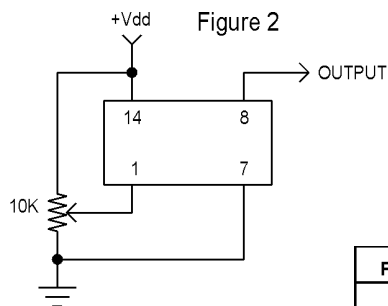
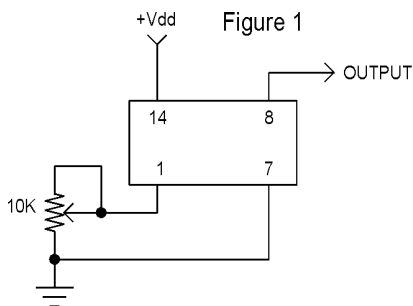
V5: Voltage Adjust (See Figure 2)

RoHS Compliance ————

Blank: non-RoHS compliant part

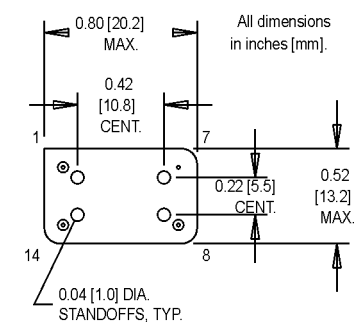
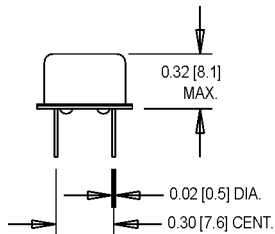
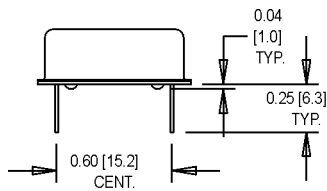
-R: RoHS compliant part

Frequency (Customer Specified) ————



Pin Connections

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



PARAMETER	Symbol	Min.	Typ.	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 @ 5.0 V
				110	mA	+30°C @ 3.3 V
				110	mA	-20°C @ 5.0 V
				160	mA	-20°C @ 3.3 V
Output Signal						HCMOS/TTL Compatible
Rise/Fall Time	Tr/Tf			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 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				

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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