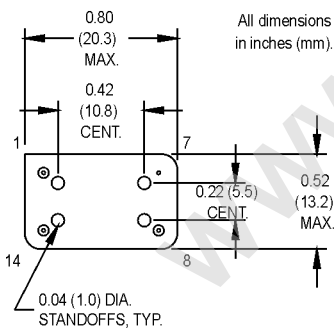
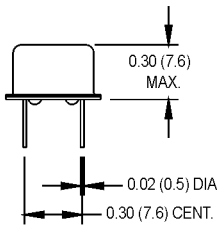
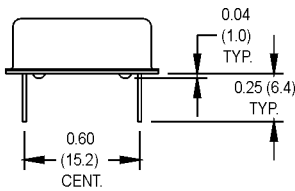
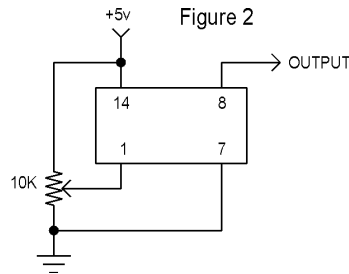
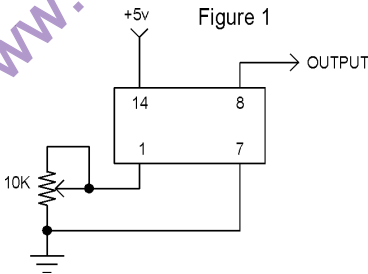
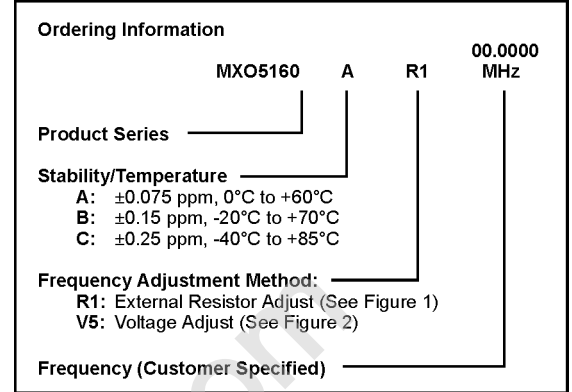


MXO5160 Series

14 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



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)		$^{\circ}\text{C}$	
Stability Over Temperature	$\Delta\text{F}/\text{F}$	(See Ordering Information)		ppm	
Short Term Stability			5×10^{-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 mA	+30 $^{\circ}\text{C}$ -20 $^{\circ}\text{C}$
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 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	
Mechanical Shock		2000 g, 0.3 ms, 1/2 sine			
Vibration		2000 Hz, 10 g			
Storage Temperature		-55 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$			
Hermeticity		Per MIL-STD-202, Method 112			
Solderability		EIAJ-STD-002			

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