

HIGH FREQUENCY VCXO OSCILLATORS

SPECIFICATIONS			HV51-*	HV52-*	HV53-*	HV54-*	HV55-*
Frequency Range			30MHz to 100MHz				
Frequency vs Temperature			±25ppm	±50ppm	±100ppm	±20ppm	±10ppm
Temperature Range			0°C to +70°C				
Output	Waveform		HCMOS Squarewave				
	Voltage	Voh	4.5V Minimum				
		Vol	0.5V Maximum				
	Current	Ioh	-8mA (30 to 52MHz) , -16mA (52.1 to 100MHz)				
		Iol	8mA (30 to 52MHz) , 16mA (52.1 to 100MHz)				
	Duty Cycle		40/60 Maximum				
	Rise/Fall Time		3nS Maximum, 15pF Load				
	Jitter (RMS)		5pS Maximum over 10Hz to 20MHz bandwidth 1pS Maximum over 12KHz to 20MHz bandwidth				
	SSB Phase Noise (Typical)		-60dBc/Hz @ 10Hz , -140dBc/Hz @ 10KHz				
Frequency Control			* Deviation Code (add to model number)				
			50	(±25ppm Minimum)			
			100	(±50ppm Minimum)			
			150	(±75ppm Minimum)			
			160	(±80ppm Minimum)			
			200	(±100ppm Minimum) Not available above 75MHz			
			300	(±150ppm Minimum) Not available above 50MHz			
			Positive Transfer Characteristic				
Control Voltage		0.5Vdc to 4.5Vdc					
Center Frequency		2.5Vdc ±0.5Vdc					
Monotonic Linearity		< ±10%					
Input Impedance		≥ 50K ohms					
Modulation Bandwidth		≥ 15KHz					
Supply Voltage			+5Vdc ±5%				
Supply Current			35mA Max <50MHz , 60mA Max <100MHz				
Package			All metal, hermetically sealed, welded package				
Option (add suffix)			S	Duty Cycle 45/55 Maximum			

WARNING!

Do not insert oscillator into a hot circuit. Failure to comply will result in damage to oscillator.

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EXAMPLE MODEL NUMBER

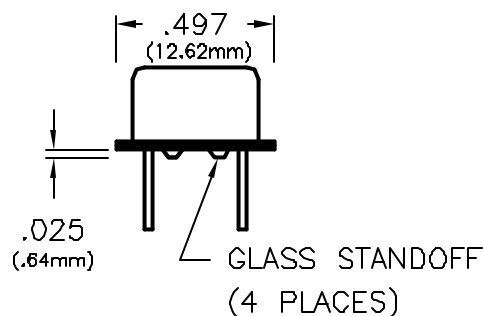
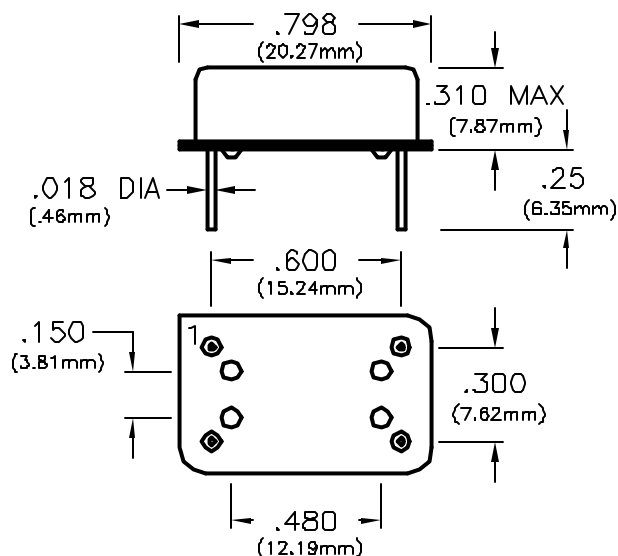
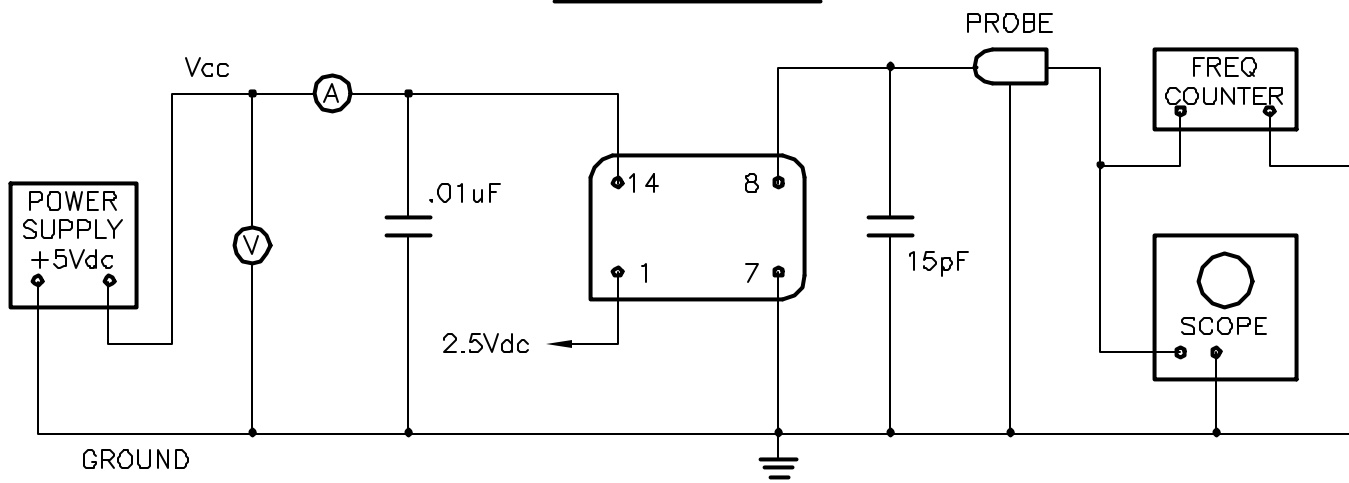
H V 5 3 - 1 0 0 / 4 4 . 7 3 6 M H z

VCXO SERIES

MINIMUM DEVIATION OF
 $\pm 50\text{ppm}$ FROM 0.5
TO 4.5Vdc CONTROL
VOLTAGE.

CENTER FREQUENCY

TEST CIRCUIT



PIN	CONNECTION
1	CONTROL VOLTAGE
7	GROUND (CASE)
8	OUTPUT
14	(+) SUPPLY