

**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				
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

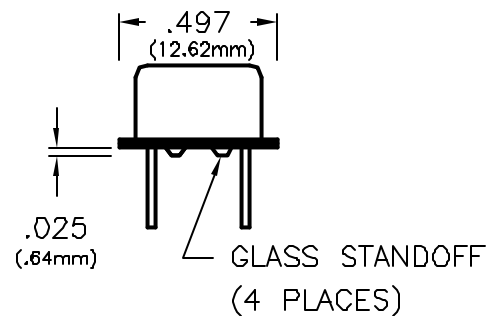
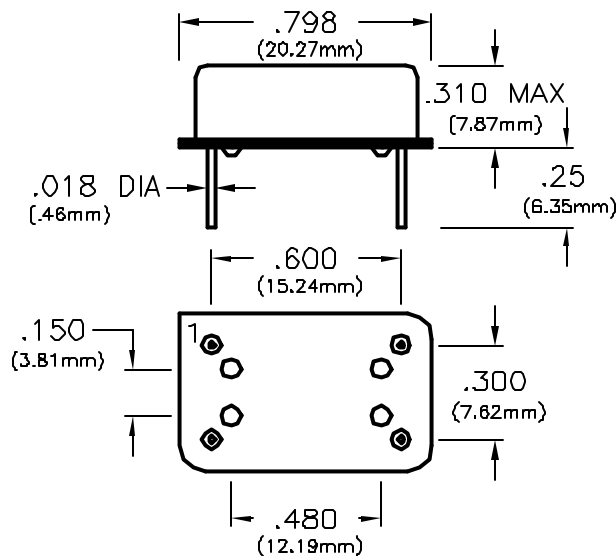
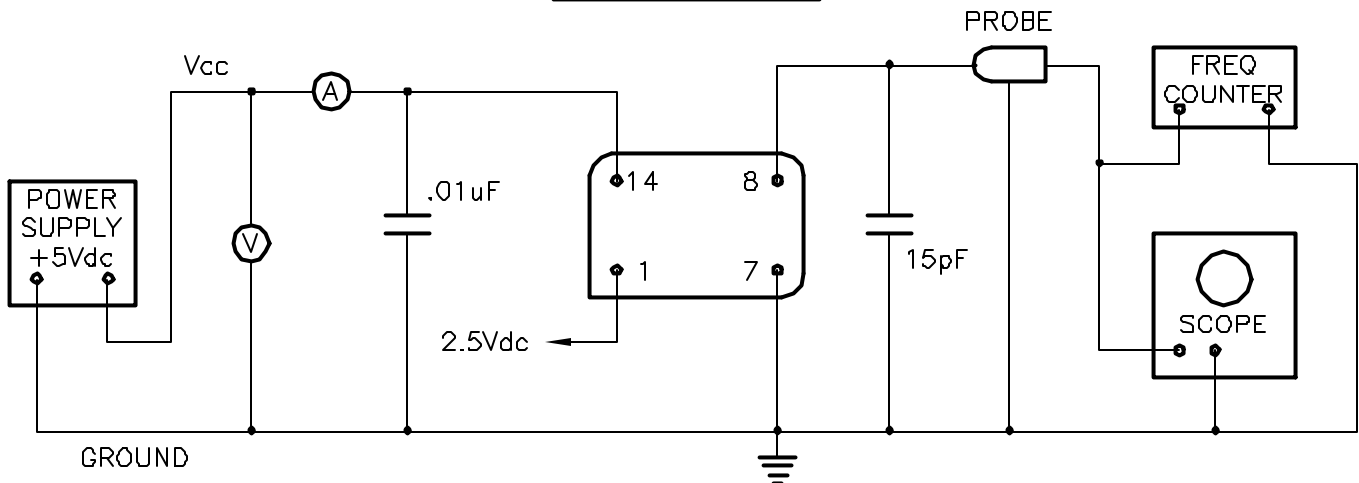
H V 5 3 - 1 0 0 / 4 4 . 7 3 6 M H z

VCXO SERIES

MINIMUM DEVIATION OF  
 $\pm 50$ 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