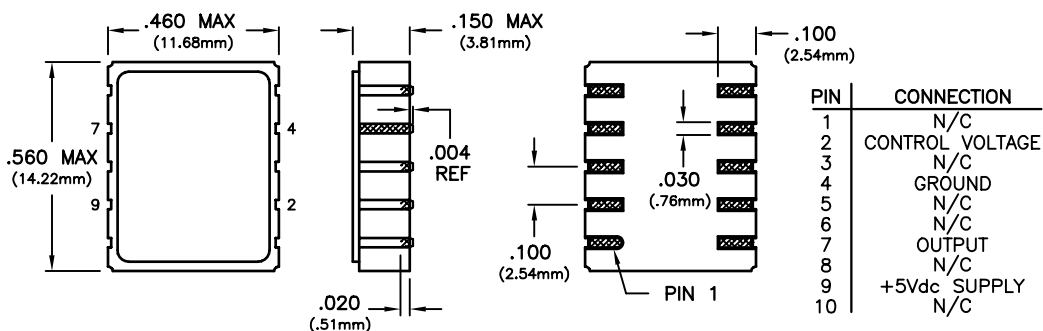


**HCMOS VCXO SURFACE MOUNT OSCILLATORS**

SPECIFICATIONS	VSH51***	VSH52***	VSH53***	VSH54***
Frequency Range	125KHz to 33MHz			
Frequency Stability	±25ppm	±50ppm	±100ppm	±20ppm
Temperature Range	0°C to +70°C			
Waveform	HCMOS Squarewave			
Load	15pF			
Output	Voh	4.50V Minimum		
	Vol	0.40V Maximum		
	Ioh	-4mA		
	Iol	4mA		
Duty Cycle	45/55 Maximum Measured @2.5Vdc			
Rise/Fall Time	6nS Maximum			
Jitter (RMS)	10pS Maximum			
Frequency Control	Control Voltage Code *(add to model number)			
	0	0.5 to 4.5Vdc	Positive Transfer Characteristic	
	1	0.0 to 5.0Vdc		
	Deviation Code *(add to model number)			
	12	100 (±50ppm Minimum)		
	15	150 (±75ppm Minimum)		
	16	160 (±80ppm Minimum)		
	22	200 (±100ppm Minimum)		
	32	300 (±150ppm Minimum)		
	Center Frequency	2.5Vdc ±0.5Vdc		
Monotonic Linearity	< ±10%			
Input Impedance	≥50K ohm at ≤10KHz			
Modulation Bandwidth	≥15KHz			
Supply Voltage	+5Vdc ±5%			
Supply Current	30mA Maximum			
Package	Hermetically sealed, leadless ceramic package			
Optional Suffix	T	Duty Cycle 45/55 Maximum Measured @1.4Vdc		



**HCMOS VCXO SURFACE MOUNT OSCILLATORS**

EXAMPLE MODEL NUMBER:

V S H 5 1 0 1 2 / 4 4 . 7 3 6 M H z

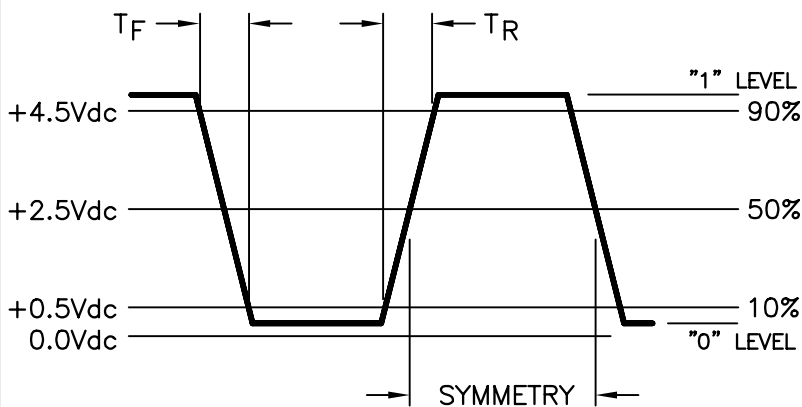
SURFACE MOUNT  
VCXO SERIES

CENTER FREQUENCY

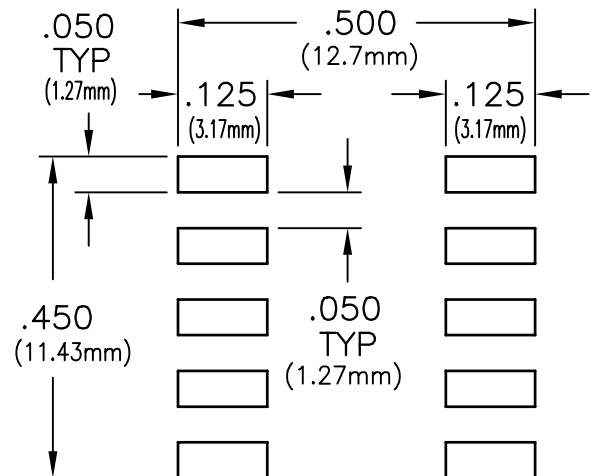
CONTROL VOLTAGE  
0.5 to 4.5Vdc

MINIMUM DEVIATION OF  
 $\pm 50$ ppm OVER  
CONTROL VOLTAGE RANGE

**OUTPUT WAVEFORM**



**SUGGESTED PAD LAYOUT**



**TEST CIRCUIT**

