

Features:

- Frequency Range 1 to 100 MHz
- 6 PIN Surface Mount Package
- 3.3 V Operation
- ACMOS/TTL Compatible
- Optional Disable Feature
- Standard Frequencies

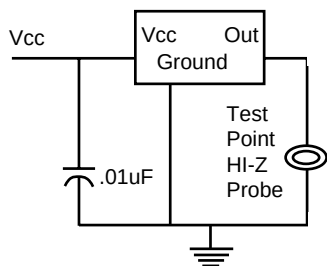
The CTS Reeves Model 324L is a small size VCXO, enclosed in a true SMT Package for use in Phase Lock Loop Applications. Its low voltage means more application flexibility. The Model 324L is available with a variety of pullability and stability options and is useful in almost any VCXO application. The optional disable feature is perfect for automated testing.



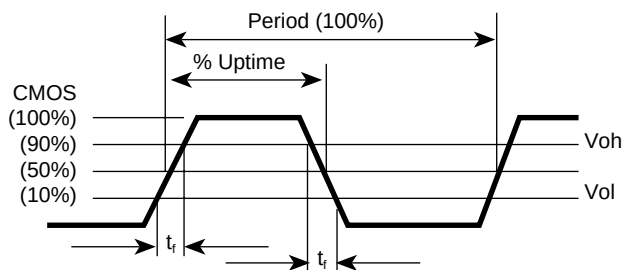
Electrical Specifications:

Parameter		Frequency Range (MHz)			
		1.0 to < 12	12 to < 25	25 to < 30	30 to < 100
Supply Voltage	Maximum Operating	7 Vdc			
		3.3 V $\pm 5\%$			
Current (ma.) ₁		35	25	35	75
Output Type		HCMOS			
Fanout ₁		15pf			
Rise and Fall Times ₁ 0.4 Vdc to +3.0 Vdc		< 3 ns	< 3 ns	< 5 ns	< 3 ns
Aging (ppm)	1st Year ₁	3	4	5	7
	10 Years ₁	12	12	15	18
Duty Cycle in % (50% Level)		50 ± 5	50 ± 10	50 ± 10	50 ± 10
Voltage Stability ₁ ppm Over Supply Range		5	5	5	6
Start Up Time (ms.)		10	10	8	8
Control Voltage		0 to 3 Vdc			
Input Impedance		50 K Minimum			
Linearity	A, B, & C Deviation	$\pm 10\%$ of Best Straight Line			
	D Deviation	$\pm 20\%$ of Best Straight Line			
Deviation Response at -3 dB		10 kHz Min.			
Deviation Slope		Positive			
Tristate Truth Table (Optional)		Pin 1 Status		Oscillator Status	
		Logic 1		Oscillator Enabled	
		Floating		Oscillator Enabled	
		Logic 0		Oscillator Disabled	
Tristate Control Voltage		0.8 Vdc (Max) to 2.2 Vdc (Min)			
Output Impedance		50 k ohms, Min.			

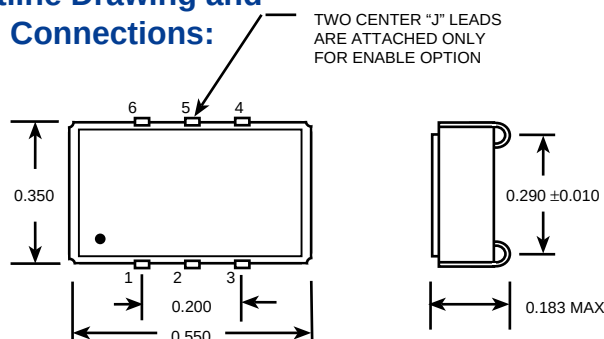
Equivalent Test Load:



Waveform Conditions:



Outline Drawing and Pin Connections:



Pin Description

PIN	FUNCTION
1	V CONTROL
2	OEH (OPTIONAL)
3	CASE/CKT GND
4	OUTPUT
5	N/C
6	Vcc

Mechanical Specifications:

Case:

Ceramic/metal, hermetically sealed

Leads:

Nickel plated with solder coating,
or gold plated

Seal:

Resistance weld

Fine Leak Test:

Mass spectrometer leak rate less than
 5×10^{-8} atmosphere-cc/sec of helium

Solderability:

95% solder coverage, using RMA flux
63 Sn / 37 Pb solder at $+245^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Temperature:

Operating: See Chart
Storage: -55 to 125°C

Vibration:

20 G's rms, 20 to 2000 Hz

Mechanical Shock:

1000 G's 5ms pulse (3 shock/plane)

Ordering Information:

Model Type 324L -

MO

Enable Options	
A	Enable/Disable
S	Standard

Temperature Stability Options	
A	± 20 ppm 0°C to $+70^{\circ}\text{C}$
B	± 50 ppm 0°C to $+70^{\circ}\text{C}$
C	± 25 ppm -20°C to $+70^{\circ}\text{C}$
D	± 25 ppm -40°C to $+85^{\circ}\text{C}$

Frequency Deviation Options	
A	± 50 ppm to ± 90 ppm
B	± 75 ppm to ± 135 ppm
C	± 100 ppm to ± 180 ppm
D	± 200 ppm to ± 360 ppm

Frequency in MHz
