

**Features:**

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

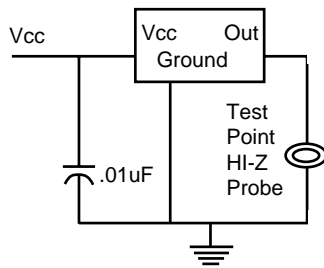


The CTS Reeves Model 324L is a small size VCXO, enclosed in a true SMT Package for use in Phase Lock Loop Applications. Its low voltage means more application flexibility. The Model 324L is available with a variety of pullability and stability options and is useful in almost any VCXO application. The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

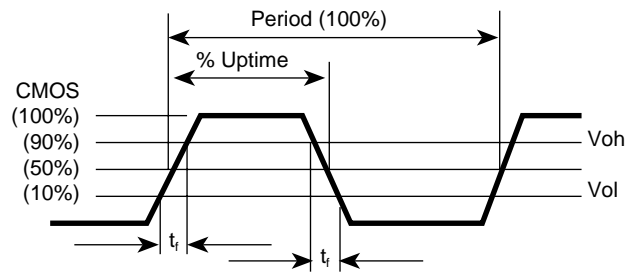
**Electrical Specifications:**

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 ±5%			
Current (ma.) <sub>1</sub>	35	25	35	75
Output Type	HCMOS			
Fanout <sub>1</sub>	15pf			
Rise and Fall Times <sub>1</sub> 0.4 Vdc to +3.0 Vdc	< 3 ns	< 3 ns	< 5 ns	< 3 ns
Aging (ppm) 1st Year <sub>1</sub> 10 Years <sub>1</sub>	3	4	5	7
	12	12	15	18
Duty Cycle in % (50% Level)	50 ±5	50 ±10	50 ±10	50 ±10
Voltage Stability <sub>1</sub> 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 D Deviation	±10% of Best Straight Line			
	±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		
Tristate Control Voltage	Logic 0 Oscillator Disabled			
Tristate Control Voltage	0.8 Vdc (Max) to 2.2 Vdc (Min)			
Output Impedance	50 k ohms, Min.			

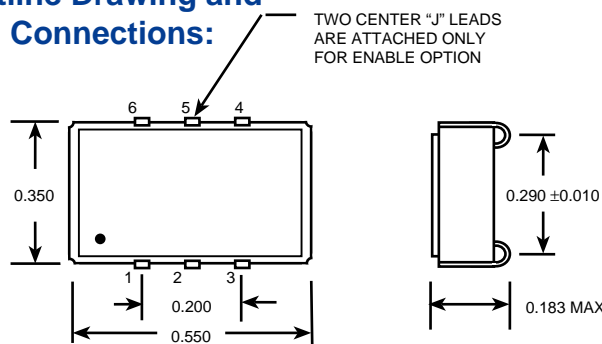
**Equivalent Test Load:**



**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  $5 \times 10^{-8}$  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  $125^{\circ}\text{C}$
- 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		Temperature Stability Options		Frequency Deviation Options		Frequency in MHz
A	Enable/Disable	A	$\pm 20$ ppm $0^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	A	$\pm 50$ ppm to $\pm 90$ ppm	
S	Standard	B	$\pm 50$ ppm $0^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	B	$\pm 75$ ppm to $\pm 135$ ppm	
		C	$\pm 25$ ppm $-20^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	C	$\pm 100$ ppm to $\pm 180$ ppm	
		D	$\pm 25$ ppm $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	D	$\pm 200$ ppm to $\pm 360$ ppm	