

Features:

- Frequency Range 1 to 100 MHz
- 6 PIN Surface Mount Package
- Excellent Temperature Stability
- AC MOS/TTL Compatible
- Optional Disable Feature
- Standard Frequencies

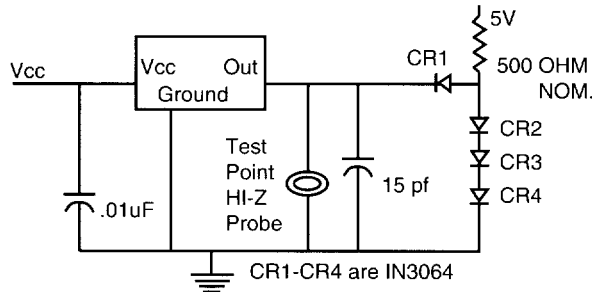


The CTS Reeves Model 324 is a small size VCXO, enclosed in a true SMT Package for use in Phase Lock Loop Applications. Its small size means more application flexibility. The Model 324 is available with a variety of pullability and stability options and is useful in almost any VCXO application. The optional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

Electrical Specifications:

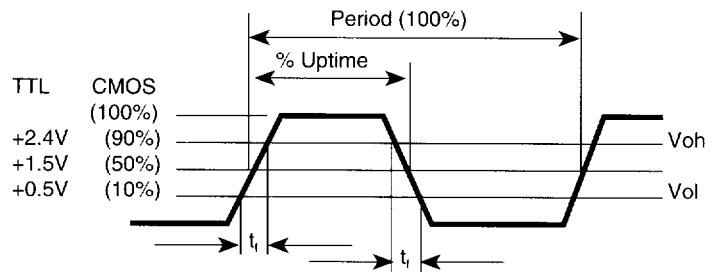
Parameter	Frequency Range (MHz)			
	1.0 to < 12	12 to < 25	25 to < 30	30 to < 100
Supply Voltage	7 Vdc			
Maximum Operating	5 Vdc \pm 5%			
Current (ma.) ₁	35	25	35	75
Output Type	ACMOS			
Fanout ₁	5 TTL (25pf)			
Rise and Fall Times, 0.8 Vdc to +2.4 Vdc	< 3 ns	< 3 ns	< 5 ns	< 3 ns
Aging (ppm)	3	4	5	7
1st Year ₁	12	12	15	18
10 Years ₁				
Duty Cycle in % (50% Level)	50 \pm 5	50 \pm 10	50 \pm 10	50 \pm 10
Voltage Stability, ppm Over Supply Range	5	5	5	6
Start Up Time (ms.)	10	10	8	8
Control Voltage	0.5 to 4.5 Vdc			
Input Impedance	100 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		
Tristate Control Voltage	Logic 0 Oscillator Disabled			
Output Impedance	0.8 Vdc (Max) to 2.2 Vdc (Min) 50 k ohms, Min.			

Equivalent Test Load: 5 TTL LOADS

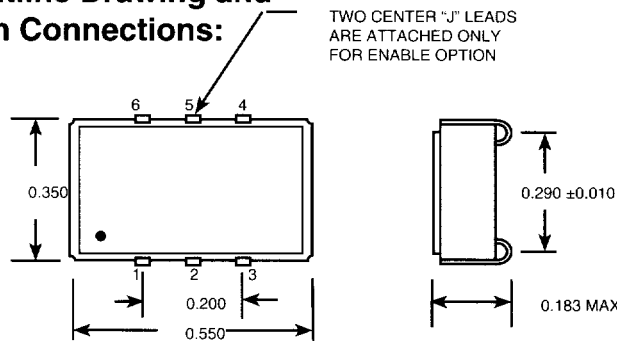


Note: Do Not Use TTL Load For CMOS Measurements

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 324 - MO

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