

Model 324L Low Voltage SM VCXO

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:

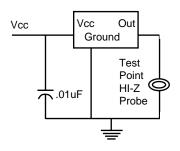
| Parameter | Frequency Range (MHz) | | | |
|-------------------------------|--------------------------------|------------|---------------------|-------------|
| - aramotor | 1.0 to < 12 | 12 to < 25 | 25 to < 30 | 30 to < 100 |
| Supply Voltage Maximum | 7 Vdc | | | |
| Operating | 3.3 V ±5% | | | |
| Current (ma.)₁ | 35 | 25 | 35 | 75 |
| Output Type | HCMOS | | | |
| Fanout₁ | 15pf | | | |
| Rise and Fall Times₁ | 2 | < 3 ns | < 5 ns | < 3 ns |
| 0.4 Vdc to +3.0 Vdc | < 3 ns | | | |
| Aging 1st Year ₁ | 3 | 4 | 5 | 7 |
| (ppm) 10 Years ₁ | 12 | 12 | 15 | 18 |
| Duty Cycle in % (50% Level) | 50 ±5 | 50 ±10 | 50 ±10 | 50 ±10 |
| Voltage Stability₁ | 5 | 5 | 5 | 6 |
| ppm Over Supply Range | | | | |
| Start Up Time (ms.) | 10 | 10 | 8 | 8 |
| Control Voltage | 0 to 3 Vdc | | | |
| Input Impedance | 50 K Minimum | | | |
| Linearity A, B, & C Deviation | ±10% of Best Straight Line | | | |
| D Deviation | ±20% of Best Straight Line | | | |
| Deviation Response at -3 dB | 10 kHz Min. | | | |
| Deviation Slope | Positive | | | |
| | Pin 1 Status | | Oscillator Status | |
| Tristate Truth Table | Logic 1 | | Oscillator Enabled | |
| (Optional) | 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. | | | |

65

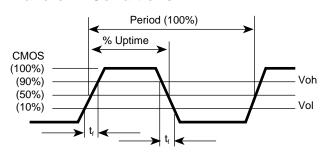


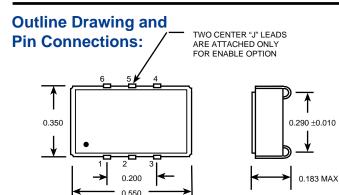
Model 324L Low Voltage SM VCXO

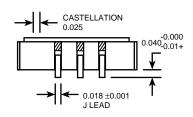
Equivalent Test Load:



Waveform Conditions:







| 2000 | | |
|------|----------------|--|
| PIN | FUNCTION | |
| 1 | V CONTROL | |
| 2 | OEH (OPTIONAL) | |
| 3 | CASE/CKT GND | |
| 4 | OUTPUT | |
| 5 | N/C | |
| 6 | Vcc | |

Pin Description

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 5x10-8 atmosphere-cc/sec of helium

Solderability:

95% solder coverage, using RMA flux 63 Sn / 37 Pb solder at +245°C ±5°C

Temperature:

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

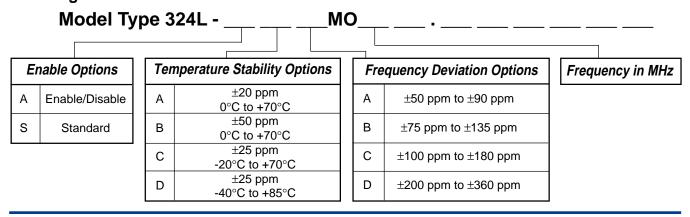
Vibration:

20 G's rms, 20 to 2000 Hz

Mechanical Shock:

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

Ordering Information:



400 REIMANN AVE. • SANDWICH, IL 60548