

Features:

- European Standard Package
- Low Aging Rate
- Precision Resonator
- Precision Temperature Stability
- Surface Mount Construction
- Low Cost

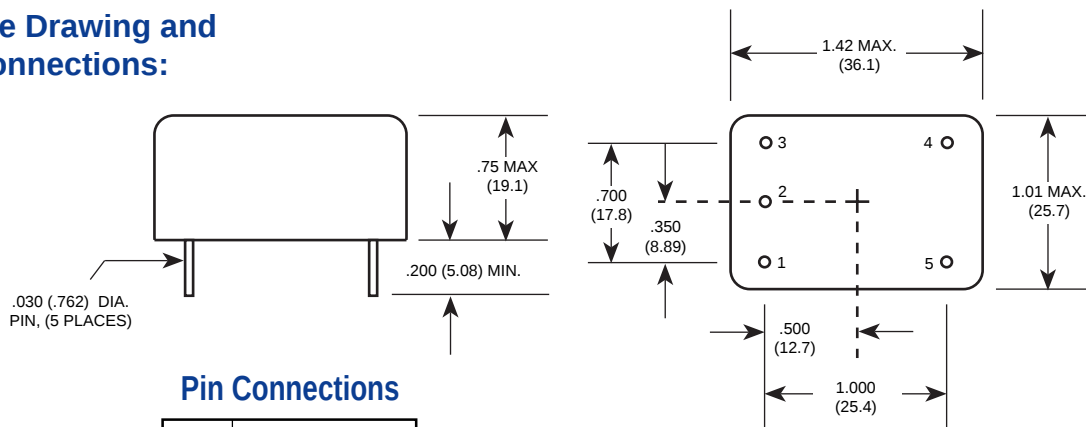
The use of an innovative thermal/mechanical design with precision resonators makes this ovenized oscillator series ideal for GPS, communications, and instrumentation applications. With a variety of options, the Model 101 is the workhorse of the CTS Reeves family of OCXOs.



Electrical Specifications:

Parameter	Frequency Range (MHz)	
	5.0 to 50 MHz	
Supply Voltage (Vdd) Operating	5 Vdc $\pm 5\%$ (OSC) 12 Vdc $\pm 5\%$ (Oven)	
Supply Current (@ 0°C) Warm Steady State (Typ. @ 25°C)	7.6 watts Max. .75 watts	
Output T S	TTL Compatible Sine°, dbm Min.	
Load T / S	1 to 5 TTL / 50 ohms	
Rise & Fall Time (.4 to 2.4 Volts)	10 ns Max.	
Warm-up (@ 25°C) Ref. to Freq. at 1 hr.	$\pm 1 \times 10^{-7}$ / 5 Min. $\pm 1 \times 10^{-8}$ / 30 Min.	
Phase Noise (Typical) (1 Hz BW @ 10 MHz)	Offset	Level (dBc)
	10 Hz	-100
	100 Hz	-135
	1 kHz	-140
	10 kHz	-155
Electrical freq. adjust (Positive slope)	Sufficient for 10 yrs Aging (Range is ± 3 ppm Typical)	

Outline Drawing and Pin Connections:



Mechanical Specifications:

Case:

CRS, Hot Tin Dipped

Leads:

Nickel plated with solder coating

Seal:

Solder seal

Leak Test:

Leak rate less than 5×10^{-5}
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 85°C

Vibration:

10 G's rms, 20 to 2000 Hz

Mechanical Shock:

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

Ordering Information:

Model Type 101

Temp. Range		Stability		Aging		Freq. Adjust.		Output Type		Freq. in MHz	
Temp Stability		$\pm 5 \times 10^{-9}$	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 5 \times 10^{-8}$	$\pm 1 \times 10^{-7}$	1 st Year Aging	Code	Freq. Adjust	Code	
Temp Range	Code	A	B	C	D	E	± 0.5 ppm	A	Electrical	E	
0° to 50° C	A	X	X	X	X	X	± 0.3 ppm	B	Mechanical	M	
0° to 70° C	B		X	X	X	X	± 0.1 ppm	C			
-30° to 70° C	C			X	X	X	± 0.05 ppm	D			
-40° to +85° C	D				X	X			Output	Code	
									TTL	T	
									Sine	S	

Note: Not all Options are Available at all Frequencies. Consult Factory for Details.