

Features:

- Frequency Range: 10 to 20 MHz
- Stabilities as low as $\pm 5 \times 10^{-8}$
- Low profile (.53 high)
- 1.5 inch sq. package
- Sinewave Output

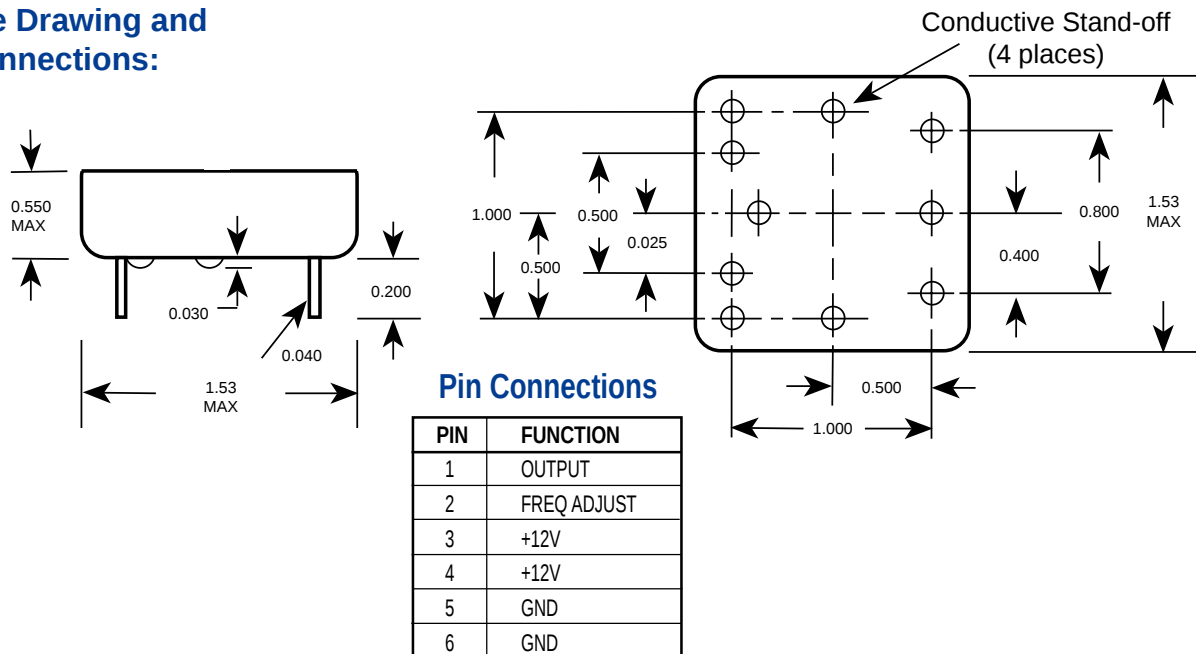
CTS Reeves model 105 is a high stability OCXO housed in a Standard TCXO package. At only .53 high it is ideal for applications requiring high stability in small size such as rack mounted or portable applications. The 105 has Sinewave output for more design flexibility. Also there are a variety of temperature and stability options to choose from.



Electrical Specifications:

Parameter	Frequency Range (MHz)		
	10.0 to 20 MHz		
Supply Voltage (Vdd)	Maximum Operating	15 Vdc 12 Vdc $\pm 5\%$	
Supply Current (@ 25C)	Warm-up Steady State	300 ma, Max. 120 ma, Max.	
Output (50 ohm load)		Sinewave 0 dBm Min.	
Load		50 Ω	
Harmonics		-25 dBc Max.	
Warm-up (@ 25C) Ref. to Freq. at 1 hr.		$\pm 1 \times 10^{-7}$ / 5 Min. $\pm 1 \times 10^{-8}$ / 30 Min.	
Phase Noise (1 Hz Bandwidth)	Offset	Level (dBc)	Standard Low Noise
	10 Hz	-110	-120
	100 Hz	-130	-140
	1 kHz	-140	-150
	10 kHz	-145	-155
Electrical freq. adjust (Positive Slope)	Sufficient for 10 yrs Aging (Range is Option Dependent) 0 to 10 Vdc		

**Outline Drawing and
Pin Connections:**



Mechanical Specifications:

Case:

Metal, hermetically sealed

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:

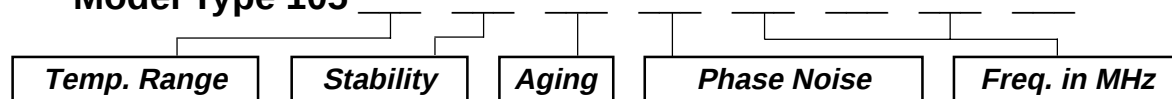
10 G's rms, 20 to 500 Hz

Mechanical Shock:

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

Ordering Information:

Model Type 105



Temp Stability		$\pm 5 \times 10^{-9}$	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 5 \times 10^{-8}$	$\pm 1 \times 10^{-7}$	1st Year Aging Code		Phase Noise Code	
Temp Range	Code	A	B	C	D	E			Standard	A
0° to 50°C	A	X	X	X	X	X	± 0.5 ppm	A	Standard	A
0° to 70°C	B			X	X	X	± 0.3 ppm	B	Low Noise	B
-30° to 70°C	C				X	X	± 0.1 ppm	C		
-40° to $+85^{\circ}\text{C}$	D					X	± 0.05 ppm	D		

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