

**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

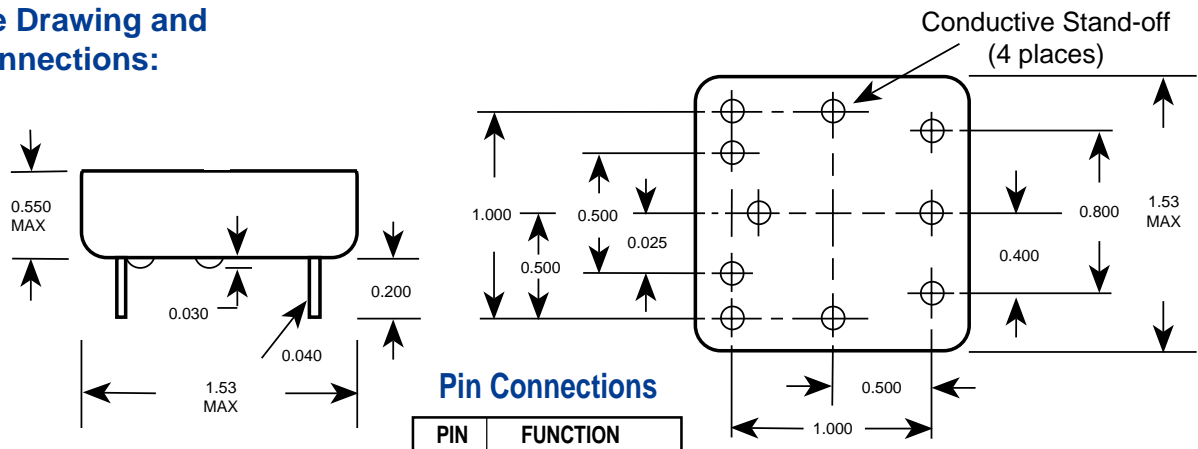
CTS Reeves model 105 is a high stability OCXO housed in a Standard TCXO package. At only .53 high it is ideal for applications requiring high stability in small size such as rack mounted or portable applications. The 105 has Sinewave output for more design flexibility. Also there are a variety of temperature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



**Electrical Specifications:**

<i>Parameter</i>	<i>Frequency Range (MHz)</i>			
	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 $\Omega$			
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:**



**Pin Connections**

PIN	FUNCTION
1	OUTPUT
2	FREQ ADJUST
3	+12V
4	+12V
5	GND
6	GND

**Mechanical Specifications:**

**Case:**

Metal, hermetically sealed

**Leads:**

Nickel plated with solder coating,

**Seal:**

Solder Seal

**Leak Test:**

Leak rate less than  $5 \times 10^{-5}$  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  $85^{\circ}\text{C}$

**Vibration:**

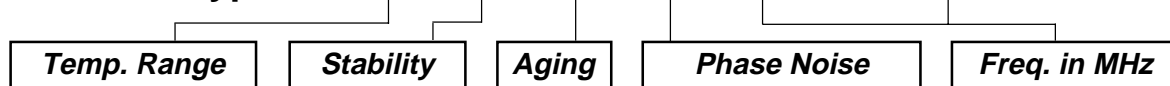
10 G's rms, 20 to 500 Hz

**Mechanical Shock:**

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

**Ordering Information:**

**Model Type 105**



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

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