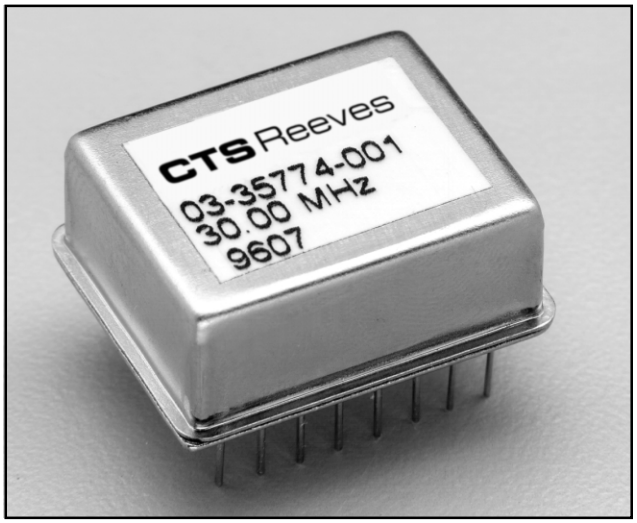
Model 531
Hybrid TCVCXO



Features:

- Frequency Range 1.0 to 50.0 MHz
- Stabilities as low as ±5 x 10^{-7}
- Low Profile (.350 high)
- Internal SMT Construction
- HCMOS/TTL Compatible
- Electrical Frequency Adjust
- 16 Pin DIL Hermetic Sealed Package

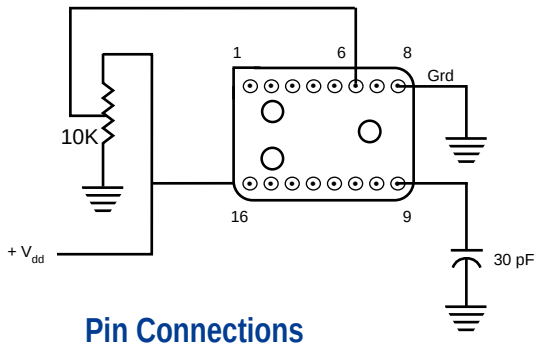
The CTS Reeves Model 531 is a high stability hybrid TCXO housed in a 16 pin DIL package that is only .350 inches high. There are a variety of temperature and stability options to choose from. Useful as a reference oscillator in digital synthesizers. The electrical frequency adjust allows for easy tuning and calibration.

Electrical Specifications:

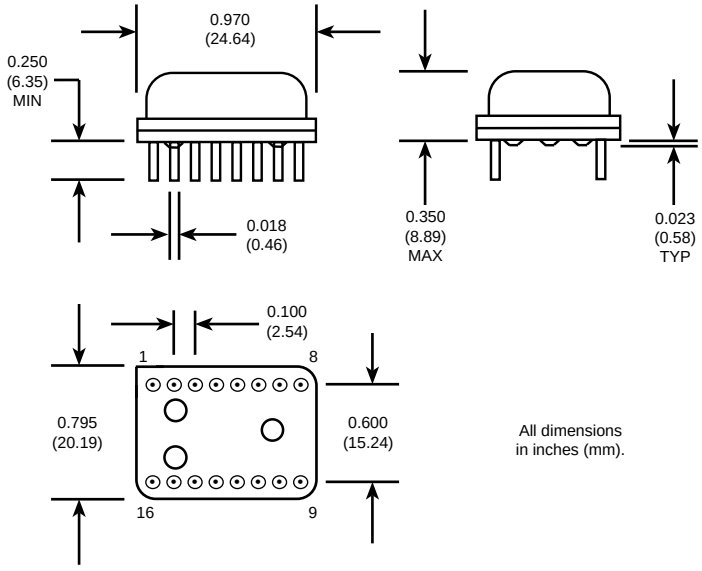
Parameter	***Frequency Range (MHz)***	
	1-20 MHz	20-50 MHz
Supply Current (mA)	25 Max.	50 Max.
Supply Voltage (Vdd)	5V ±5%	
Output Type	HCMOS/TTL	
Symmetry	50% ±10% HCMOS/TTL, 50% ±5% HCMOS	
Logic "0" Level	TTL (.5 Vdc), HCMOS (10% Vdd)	
Logic "I" Level	TTL (Vdd - .5), HCMOS (90% Vdd)	
Rise/Fall Time	5.0 nS Max (5 TTL), 10 nS Max. (30 pF HCMOS)	
Aging	±1.0 ppm/year Max.	
Stability	See Chart	
Frequency Adjust	±5 ppm Min.	
Adjust Voltage (Pin 6)	0.5 to 4.5V	

Model 531
Hybrid TCVCXO

Test Circuit:



Outline Drawings:



All dimensions in inches (mm).

Pin Connections

PIN	FUNCTION
6	CONTROL VOLTAGE
8	GND.
9	OUTPUT
16	+Vdd 5V

Mechanical Specifications:

Case:
Metal, hermetically sealed

Leads:
Nickel plated with solder coating

Seal:
Resistance weld

Leak Test:
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 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 531 _____ _____ _____ _____ _____ _____

Temperature — ***Stability*** — ***Frequency in MHz***

Temperature - Stability Options						
		A	B	C	D	E
Temp. Range	T / S	±0.5	±1.0	±2.0	±2.5	±5.0
A	0° to 50°	X	X	X	X	X
B	0° to 70°		X	X	X	X
C	-20° to 70°		X	X	X	X
D	-30° to 75°			X	X	X
E	-40 to 85°			X	X	X

Temperatures in °C.
Stability in ppm

TCXOs

400 REIMANN AVE. • SANDWICH, IL 60548
Phone: 815-786-8411 • Fax: 815-786-3600 • E-Mail: www.ctsreeves.com