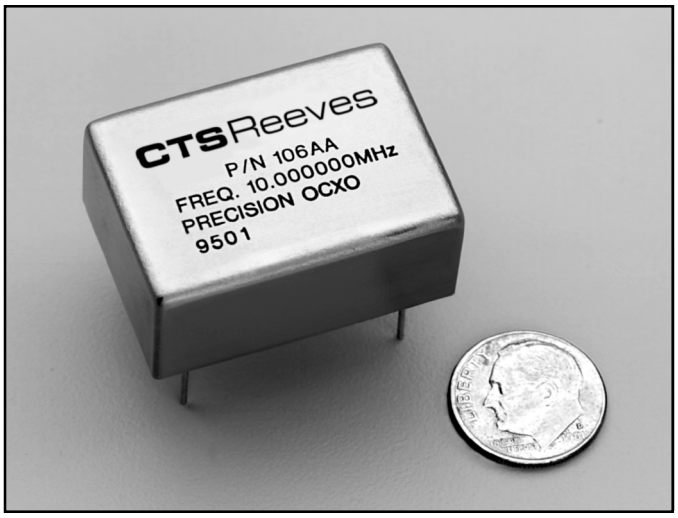
Model 106
Low Power OCXO

Features:

- Frequency Range: 5 to 20 MHz
- Stabilities as low as ±5 X 10^{-8}
- Low Power
- Small Size - only 1.02" x 1.42" x 0.53"
- Squarewave Output



The Model 106 OCXO provides big OCXO stability with power consumption similar to a TCXO. Requiring about 200 mw of power when stabilized, it can provide temperature stabilities of less than 5 x 10^{-8}. The Model 106 comes with a small footprint of 1.02" x 1.42" x .53", and is perfect for portable or battery operated applications.

Electrical Specifications:

Parameter	***Frequency Range (MHz)***	
	5.0 to 20 MHz	
Supply Voltage (Vdd) Maximum Operating	15 Vdc 12 Vdc ±5% (+5 Vdc Optional)	
Supply Current (@ 0°C) Warm-up Steady State	100 ma. Max. 20 ma. Max.	
Output	TTL Compatible (Sinewave Optional)	
Load	1 to 5 TTL	
Rise & Fall Time (.4 to 2.4 Volts)	10 ns Max.	
Warm-up (@ 25°C) Ref. to Freq. at 1 hr.	±1 x 10^{-7} / 5 Min. ±1 x 10^{-8} / 30 Min.	
Phase Noise (1 Hz Bandwidth)	Offset	Level (dBc)
	10 Hz	-100
	100 Hz	-130
	1 kHz	-140
	10 kHz	-155
Electrical freq. adjust (Positive slope)	Sufficient for 10 yrs Aging (Range is ±3 ppm Typical) 0 to 5 Vdc	

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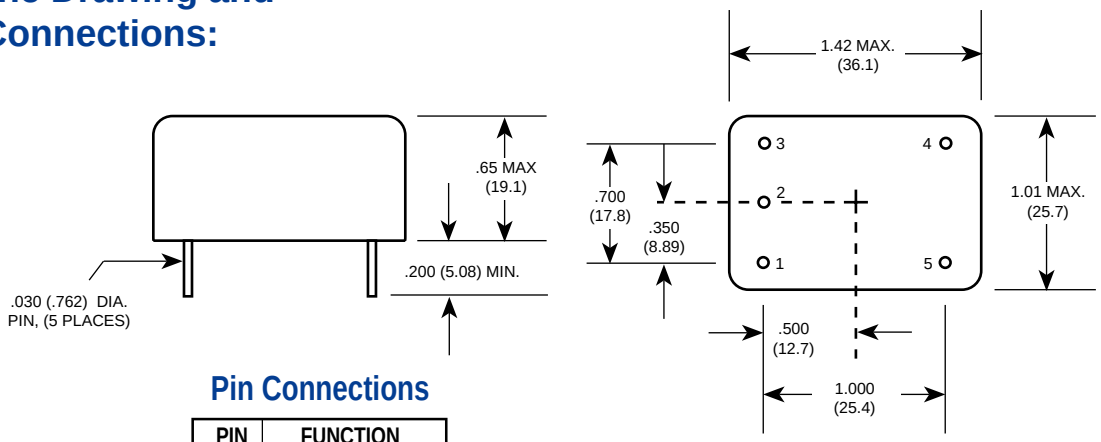
Outline Drawing and Pin Connections:



Pin Connections

PIN	FUNCTION
1	Freq. Adjust (NC)
2	V ref
3	+12 Vdd
4	Output
5	Case/Ckt. Gnd.

Dimensions in inches (millimeters)

Mechanical Specifications:

Case:
CRS, Hot Tin Dipped

Leads:
Nickel plated with solder coating

Seal:
Solder seal

Leak Test:
Leak rate less than $5x10^{-5}$ 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 106 ____

Temp. Range | ***Stability*** | ***Aging*** | ***Freq. Adjust*** | ***Freq. in MHz***

Temp Stability		±2 x 10^{-8}	±5 x 10^{-8}	±1 x 10^{-7}
Temp Range	Code	C	D	E
0° to 50°C	A	X	X	X
0° to 70°C	B		X	X
-30° to 70°C	C			X

1st Year Aging	*Code*
±0.5 ppm	A
±0.3 ppm	B

Frequency Adjust	*Code*
Electrical	E
Mechanical	M

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

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