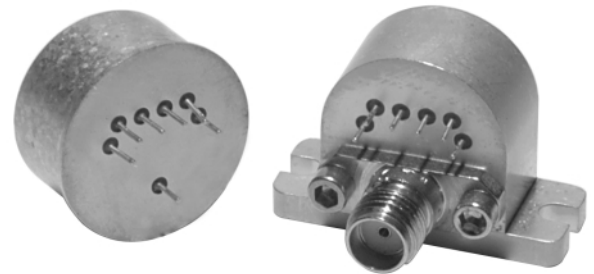


## Features

- Low Phase Noise: -105 dBc/Hz @ 10K (typ.)  
-128 dBc/Hz @ 100K (typ.)
- Low Cost YIG Oscillator
- Up to  $\pm 450$  MHz Tuning Range
- Low Power (0 – 5 dBm) and Buffered (8 – 14 dBm) Options Available
- Outstanding Phase Hit Performance in 64 and 128 QAM Radio Systems
- SMA Connectorized Package and Board Mount Package Options
- Utilizes Metal Injection Molding (MIM) Packaging Technology



## Specifications\*

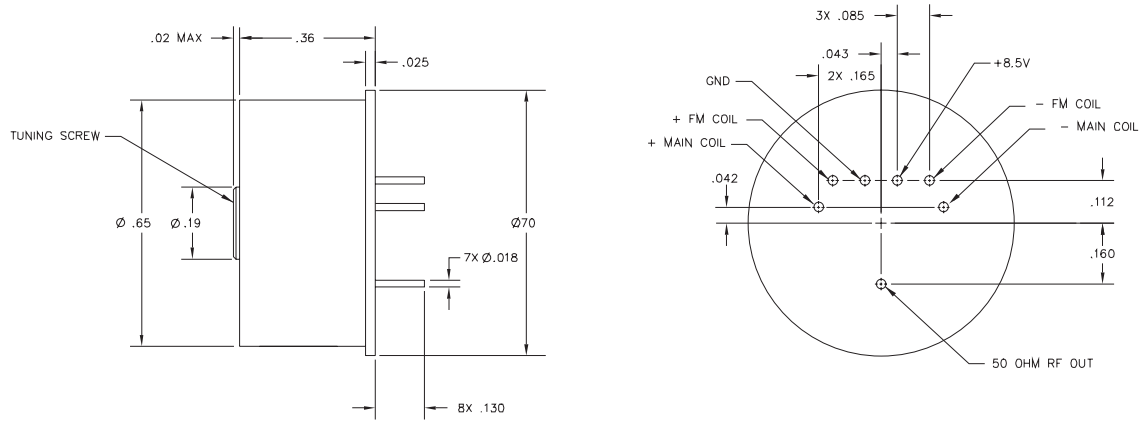
Characteristics	Typical <sup>1</sup>	Guaranteed <sup>1</sup> -40°C to +85° C
Center Frequency (Zero Tune Current)	3 GHz to 10 GHz	
Phase Noise		
1K offset	-82	-75
10K offset	-105	-100
100K offset	-128	-123
Power Output non-buffered	5 dBm	0 – 5 dBm
Power Output buffered	10 dBm	8 – 14 dBm
Frequency Drift Over Temperature	$\pm 30$ MHz	$\pm 60$ MHz
DC Circuit Current at +8.5 $\pm$ .25 Volts non-buffered	20 mA	30 mA
DC Circuit Current at +8.5 $\pm$ .25 Volts buffered	70 mA	90 mA
<b>Harmonic Performance</b>		
Second Harmonic	-12 dBc min.	
Third Harmonic	-12 dBc min.	
Spurious Output	-60 dBc min.	
<b>Tuning Characteristics</b>		
Main Coil <sup>2</sup>		
Sensitivity	typically 5 MHz/mA $\pm 10\%$	
Coil Impedance (various)	typically 26 Ohms	
Modulation Bandwidth	>35 kHz	
FM Coil <sup>2</sup>		
Sensitivity	150 kHz/mA $\pm 20\%$	
Modulation Bandwidth	>400 kHz	
Deviation	$\pm 50$ MHz	
Coil Impedance	1 ohm, 2 microH	

1. Typical and Guaranteed specifications measured in a 50 ohm system at the nominal power

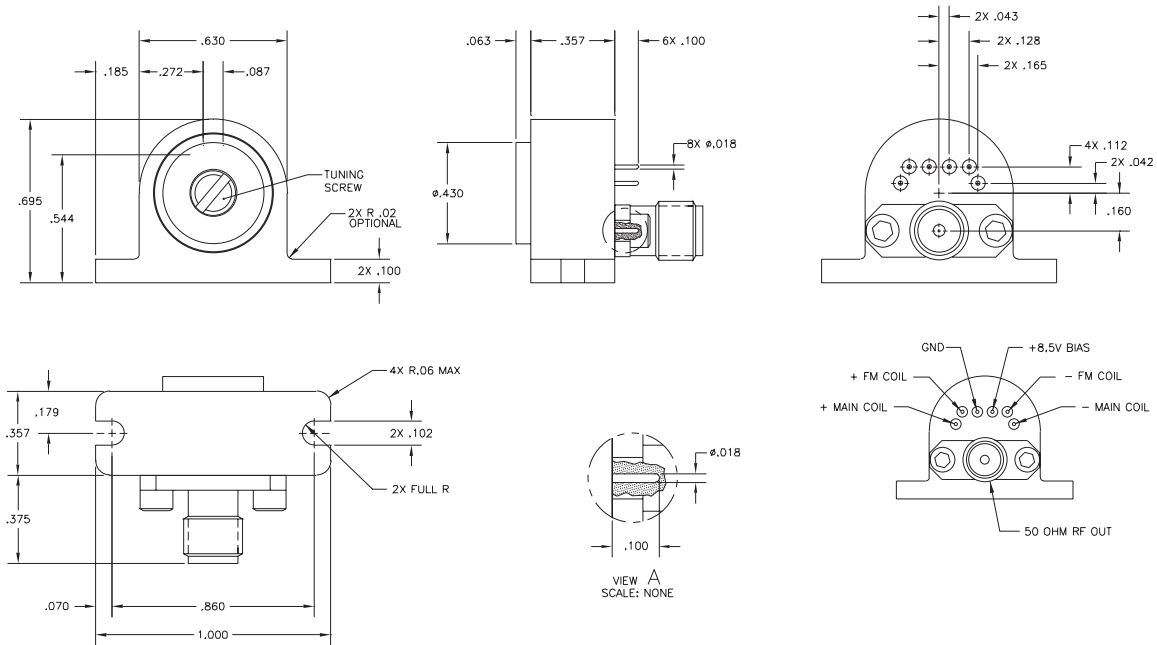
2. Other Main Coil and FM Coil Sensitivities available.

# MicroYIG Oscillator

## TO-8 Package



## SMA Connectorize Package



Endwave #: DS-005-02-YIG Rev. 062002



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Endwave is an  
 ISO 9001 certified company