



**MULTI-OCTAVE
2.0 to 18.0 GHz
YIG-TUNED
OSCILLATORS**

ELECTRICAL SPECIFICATIONS

Model Number	YOM-103	YOM-104	YOM-102	YOM-105
Frequency Range	2-8 GHz	2-12 GHz	4-8 GHz	2-18 GHz
RF Power Output (Minimum)	20 mW	7 mW	20 mW	2 mW
RF Power Output Variation	±2.5 dB	±3.0 dB	±2.0 dB	±5.0 dB
Pulling figure (VSWR 1.5:1)	±1.5 MHz	±1.5 MHz	±1.2 MHz	±1.5 MHz
Second Harmonic Attenuation	40 dB	40 dB	40 dB	40 dB
Other Spurious Attenuation	>45 dB	>45 dB	>45 dB	>45 dB
Freq. Drift 0° to 60°C (Heat Sink)	7 MHz	9 MHz	7 MHz	14 MHz
Tuning Linearity	0.5%	0.25%	0.2%	0.25%
Hysteresis	8 MHz	12 MHz	8 MHz	18 MHz
Tuning Speed*	16 mSec	16 mSec	5 mSec	16 mSec
Multiplier Tuning Sensitivity (Typical)	22 MHz/mA	22 MHz/mA	22 MHz/mA	27 MHz/mA
Oscillator** Coil Resistance (Typical)	11 MHz/mA	11 MHz/mA	11 MHz/mA	11 MHz/mA
Multiplier Inductance (Typical)	10 ohms	10 ohms	10 ohms	10 ohms
Oscillator** Tuning Sensitivity (Typical)	8 ohms	8 ohms	8 ohms	8 ohms
Multiplier Coil Resistance (Typical)	120 mH	120 mH	120 mH	120 mH
Oscillator** Inductance (Typical)	50 mH	50 mH	50 mH	50 mH

* Full band within 6 MHz of its final frequency. ** 1-2 GHz oscillator.

MECHANICAL SPECIFICATIONS, all model numbers

Output RF Connector	3 mm Female
DC Connector	Solder Pins
Dimensions ⁵	4.5 x 2.0 x 5.0 in.
Weight ⁵	34 oz.
Mounting	6-32 Tapped Holes (4 plcs)

POWER SUPPLY REQUIREMENTS, all model numbers

Amplifier Supply	+20 Vdc @ 500 mA
Oscillator Supply (1-2 GHz)	+20 Vdc @ 100 mA ¹
Heater Supply	20-30 Vdc @ 50 mA

NOTES:

1. Each oscillator will have test data sheet and the exact voltage will be indicated.
2. YIG drivers for the above models are supplied in one integral package with oscillator and multiplier.
3. Driver control voltage is typically 0 - 10 volts.
4. Other frequency ranges and higher power outputs are available upon request.
5. Dimensions and weight are for integral multiplier/oscillator/amplifier.