

FEATURES

- ❖ Internal voltage regulated
- ❖ Excellent frequency stability
- ❖ Low phase noise
- ❖ Low cost and reliable construction

APPLICATIONS

- ❖ Communication systems
- ❖ Radar systems
- ❖ Frequency reference
- ❖ Local oscillators

DESCRIPTION

OFD series dielectric resonator stabilized oscillators cover the frequency range of 5 to 26.5 GHz. The oscillators utilize state of the art MIC and FET devices technology to provide highly stable, reliable and clean signal sources. Each oscillator has an internal voltage regulator to provide regulated bias and over-voltage protection. An internal isolator may be integrated in to improve the anti-load pulling ability. Standard products incorporate a screw tuner with a reliable self-locking feature to provide small mechanical frequency tuning. SMA or K female coaxial connector is equipped for standard RF interface. The electrical tunable dielectric resonator oscillators are offered as non-standard units. Consult factory for technical information regarding this choice.



OFD Series

SPECIFICATIONS

Frequency Range	8.0 to 13.0 GHz	13.0 to 18.0 GHz	18.0 to 26.5 GHz
Output Power	13 to 23 dBm	13 to 23 dBm	13 to 23 dBm
Frequency Stability	+/-3 ppm/°C	+/-3 ppm/°C	+/-3 ppm/°C
Phase Noise (Typ)	-70 dBc/Hz @ 1KHz offset -80 dBc/Hz @ 10KHz offset -113 dBc/Hz @ 100KHz offset	-65dBc/Hz at 1KHz offset -75dBc/Hz at 10KHz offset -107dBc/Hz at 100KHz offset	-60dBc/Hz at 1KHz offset -70dBc/Hz at 10KHz offset -102dBc/Hz at 100KHz offset
Harmonic (Max)	-20 dBc	-20 dBc	-20 dBc
Spurious (Max)	-70 dBc	-60 dBc	-60 dBc
Bias (V/mA)	+12 Vdc / 50 to 150 mA	+12 Vdc / 100 to 200 mA	+12 Vdc / 100 to 200 mA
Outline Drawing	Consult Factory	Consult Factory	Consult Factory
Temperature	0 to +50 °C		

HOW TO ORDER

Specify Model Number

OFD - CO CF BW PP - XX ← Factory Reserve

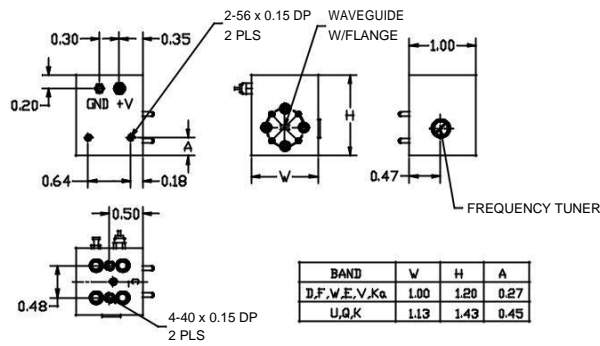
RF Connector Type ↑ Output Power in dBm

Center Frequency in GHz ↑ Mechanical Tuning Range in MHz

Example: To order an DRO with SMA female connector, frequency output 18 GHz, mechanical tuning bandwidth 10 MHz and power output 16 dBm, specify OFD-SF181016-XX.

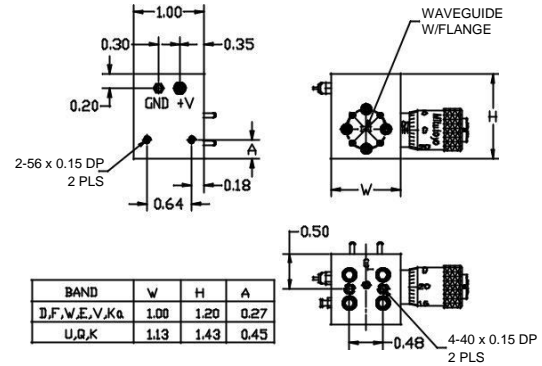
Oscillator Outline Drawings #1

WT-G-1



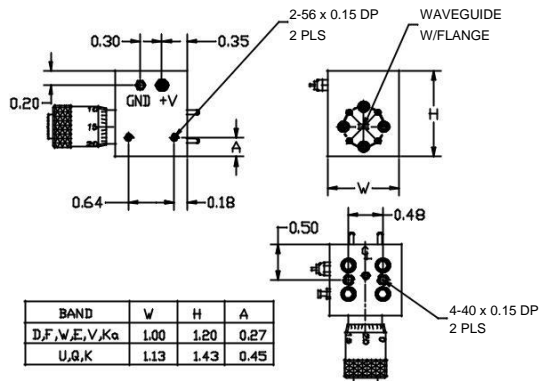
Dimensions are in inches

WT-G-2



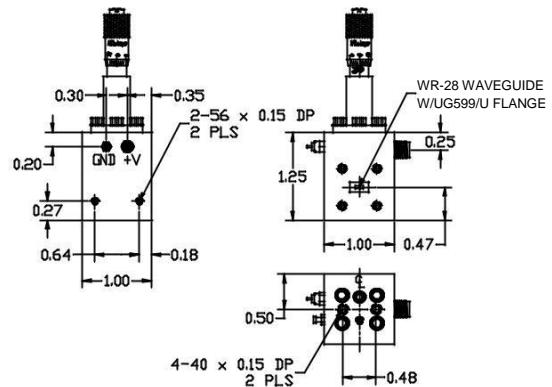
Dimensions are in inches

WT-G-3



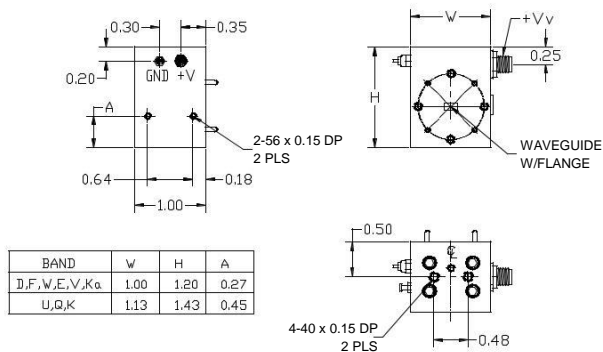
Dimensions are in inches

WT-G-4



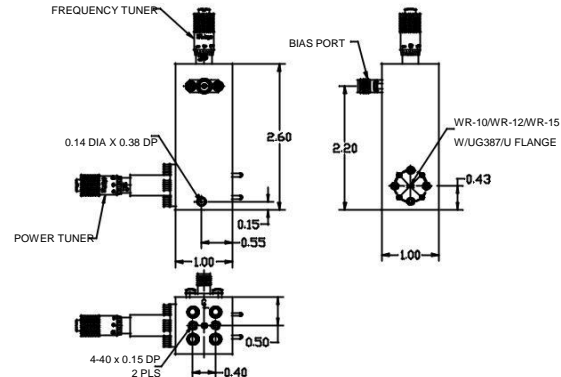
Dimensions are in inches

WT-G-5



Dimensions are in inches

WT-G-6

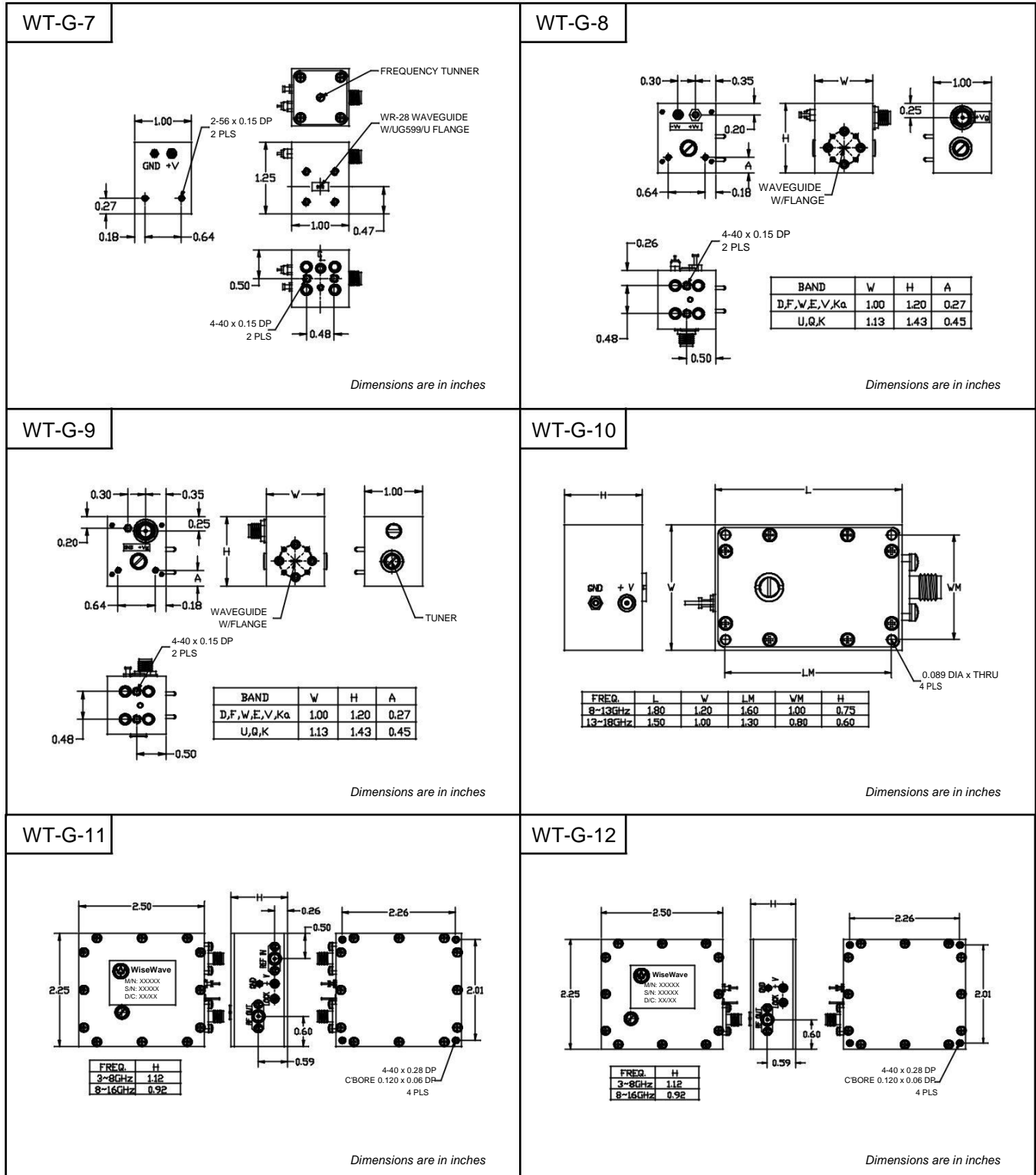


Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.

Oscillator Outline Drawings #2

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The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.