

DIELECTRIC RESONATOR OSCILLATOR

Model 518038

14 GHz to 15 GHz

Features

- Low Phase Noise
- Rugged Construction for Extreme Environmental Conditions
- High Frequency Stability
- Mechanically Tuned

Specifications

CHARACTERISTIC	TYPICAL $T_a = +25\text{ }^\circ\text{C}$	MIN/MAX $T_a = -55\text{ }^\circ\text{C to } +85\text{ }^\circ\text{C}$
Frequency	14 - 15 GHz	14 - 15 GHz
Output Power (dBm)	+13.0	+10.0 Min.
Power Flatness (dBm)	+/- 1.5	+/- 3.0
Frequency Stability (ppm)/ $^\circ\text{C}$	4	3 to 5
Harmonics (dBc)	-20	-15 Max.
Spurious (dBc)	-80	-80 Max.
Phase Noise (14 GHz) @ 100 KHz (dBc/Hz)	-117	-115 Max.
Load VSWR	1.5:1	2.0:1 Max.
Power	Vdc mA	+15 90 Max.

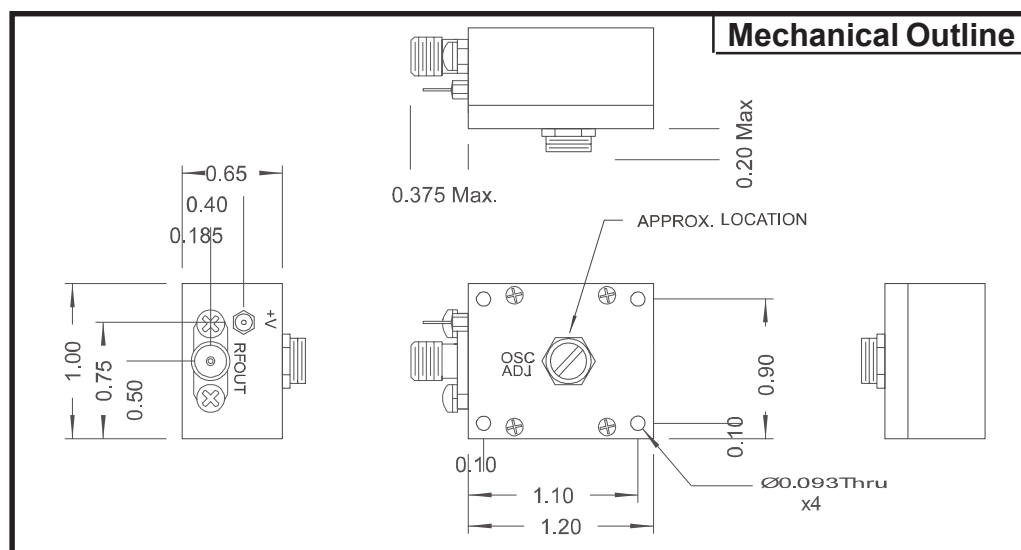
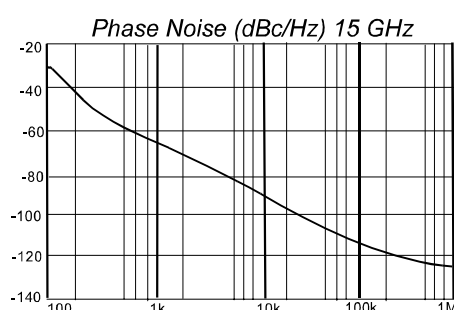
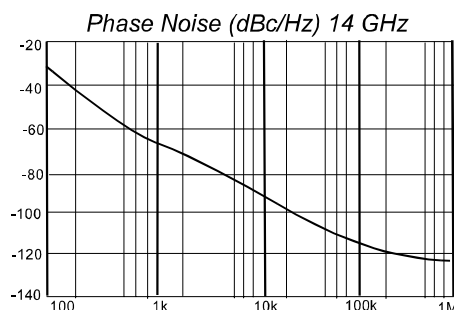
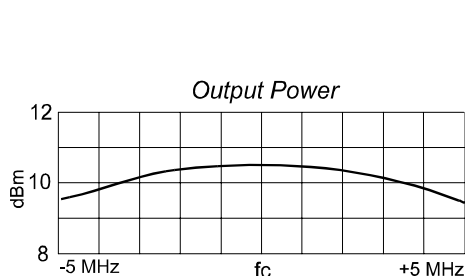
Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature $-55\text{ }^\circ\text{C}$ to $+100\text{ }^\circ\text{C}$
 Storage Temperature $-62\text{ }^\circ\text{C}$ to $+125\text{ }^\circ\text{C}$
 Case Temperature $+125\text{ }^\circ\text{C}$
 DC Voltage +24 Volts
 Maximum DC Tuning Voltage +20 Volts
 Minimum DC Tuning Voltage 0 Volts

NOTE: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data

Phase Noise	Typical	Typical
Offset	14 GHz	15 GHz
1 kHz	-65	-64
10 kHz	-92	-90
100 kHz	-117	-116



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