

DIELECTRIC RESONATOR OSCILLATOR

Model 518040

15 GHz to 16 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 $T_a = -55^{\circ}\text{C to } +85\text{ }^{\circ}\text{C}$
Frequency	15 - 16 GHz	15 - 16 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 (15 GHz) @ 100 KHz (dBc/Hz)	-116	-114 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°C to $+100\text{ }^{\circ}\text{C}$
 Storage Temperature -62°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	15 GHz	16 GHz
1 kHz	-64	-63
10 kHz	-90	-88
100 kHz	-116	-115

