



Dielectric Resonator Oscillator, 16 GHz, +13 dBm

Description:

Model SOD-16302213-SF-C1 is a mechanically tuned, dielectric resonator oscillator with a center frequency of 16 GHz and a mechanical tuning range of ± 150 MHz. The oscillator delivers a nominal output power of +13 dBm with a low phase noise and harmonic emissions. The oscillator takes a +15 V_{DC}/150 mA DC bias. The RF output is equipped with a female SMA connector.



Features:

- Low AM/FM Noise and Harmonics
- Mechanically Tunable

Applications:

- Test Sources
- Signal Generation
- Lab Test Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Center Frequency		16 GHz	
Power Output		+13 dBm	
Mechanical Tuning Range		± 150 MHz	
Frequency Stability			± 5 ppm/ $^{\circ}$ C
Phase Noise @ 10 KHz Offset		-80 dBc/Hz	
Spurious			-75 dBc
Harmonics			-25 dBc
Bias Voltage	+12 V _{DC}	+15 V _{DC}	+16 V _{DC}
Bias Current		150 mA	
RF "OFF" Control		< 0.25 Vdc / -100 uA	
RF "ON" Control		1.4 to 1.5 Vdc / +10 uA	
Specification Temperature		+25 $^{\circ}$ C	
Operating Temperature	0 $^{\circ}$ C		+50 $^{\circ}$ C

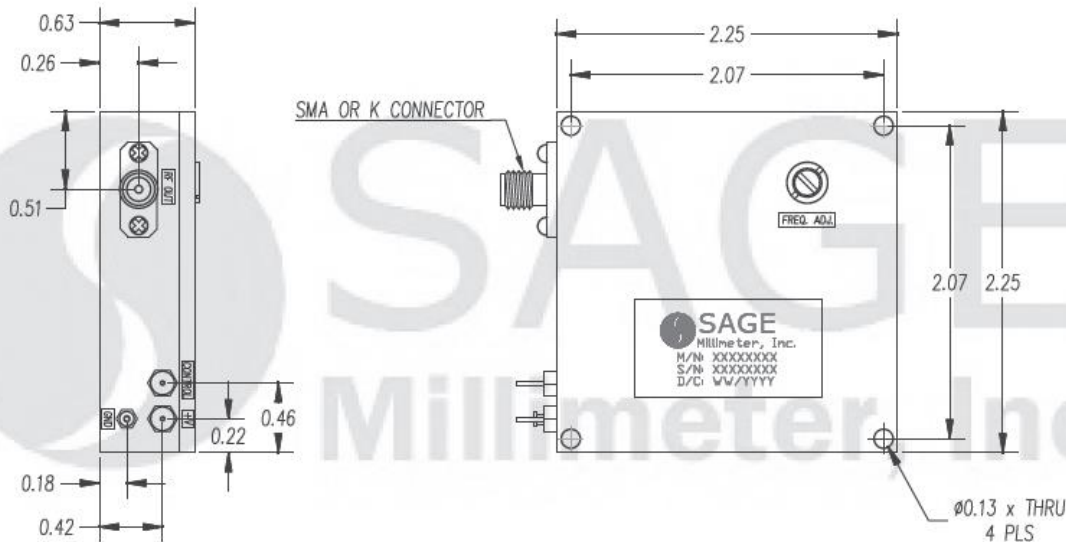
Mechanical Specifications:

Item	Specification
RF Port	SMA (F)
DC Bias	Solder Pin
Control Port	Solder Pin
Finish	Chem Film
Weight	6.2 Oz
Size	2.25" (L) x 2.25" (W) x 0.63" (H)
Outline	OD-FX6



Dielectric Resonator Oscillator, 16 GHz, +13 dBm

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model number.

Caution:

- Reversing polarity bias will destroy the device.
- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed **+50°C**. Use additional heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

