



Dielectric Resonator Oscillator, 4 GHz, +15 dBm

Description:

Model SOD-04304115-SF-C2 is a mechanically tuned, dielectric resonator oscillator with a center frequency of 4 GHz and a mechanical tuning range of ± 20 MHz. The oscillator delivers a nominal output power of +15 dBm with a low phase noise and harmonic emissions. The oscillator takes a +15 V_{DC}/200 mA DC bias. The RF output is equipped with a female SMA connector.



Features:

- Low AM/FM Noise and Harmonics
- Mechanically Tunable
- Built in Isolator

Applications:

- Test Sources
- Signal Generation
- Lab Test Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Center Frequency		4 GHz	
Power Output		+15 dBm	
Mechanical Tuning Range		± 20 MHz	
Frequency Stability			± 5 ppm/ $^{\circ}$ C
Phase Noise @ 100 KHz Offset		-100 dBc/Hz	
Spurious		-75 dBc	
Harmonics			-20 dBc
Return Loss		15 dB	
Bias Voltage	+10 V _{DC}	+15 V _{DC}	+16 V _{DC}
Bias Current		200 mA	
Specification Temperature		+25 $^{\circ}$ C	
Operating Temperature	0 $^{\circ}$ C		+50 $^{\circ}$ C

Mechanical Specifications:

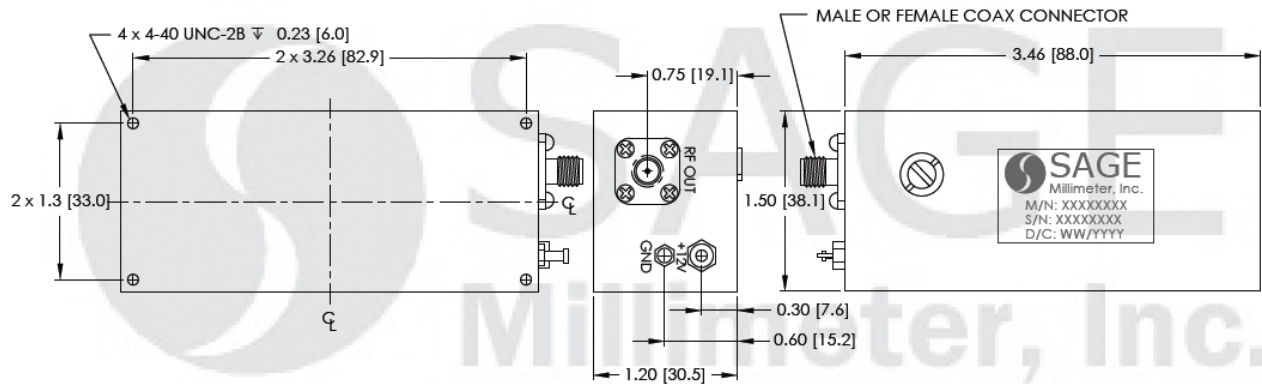
Item	Specification
RF Port	SMA (F)
DC Bias	Solder Pin
Finish	Chem Film
Weight	4 Oz
Size	3.46" (L) x 1.5" (W) x 1.2" (H)
Outline	OD-FCE-P2





Dielectric Resonator Oscillator, 4 GHz, +15 dBm

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



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 (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

