

OS8900

6900 TO 8900 MHz VOLTAGE CONTROLLED OSCILLATOR

Typical Values @ +25 °C

Tuning Voltage Limits
Power Output
Power Flatness
Standard Size SMTO-8 Package

OS8900

1.0-11.5 V
+1.0 dBm
2.0 dB

SPECIFICATIONS*

Parameter	Guaranteed -55 to +85 °C	
	Typical 6800-8900 MHz	6900-8900 MHz
Frequency		
Tuning Voltage Limits		
Tuning Voltage at low end	1.0 V	0 V
Tuning voltage at high end	11.5 V	15 V
Power Output (Min.)	+1 dBm	-3 dBm
Power Flatness[^] (Max.)	2.5 dB	4.0 dB
Modulation Sensitivity (Min.-Max.)	100 to 290 MHz/V	60 to 310 MHz/V
Modulation Sensitivity Ratio (Max.)	3.1:1	4.0:1
SSB Phase Noise (Max.)		
at 10 kHz offset	-69 dBc/Hz	-60 dBc/Hz
at 100 kHz offset	-95 dBc/Hz	-92 dBc/Hz
Harmonics (Max.)	-17.0 dBc	-10.0 dBc
Spurious (Max.)	-60.0 dBc	-60.0 dBc
Frequency Pulling (Max.)		
Load VSWR = 1.67:1	47.0 MHz	65.0 MHz
Frequency Pushing (Max.)		
V _{dc} ± 0.5 V	21.0 MHz/V	40.0 MHz/V
Bias Voltage (V_{dc})	5.0 V	5.0 V
DC Current (Max.)	27 mA	30 mA

* Specifications are measured in 50-ohm system at +5 Volts bias unless otherwise specified.
^ Power Flatness is defined as power variation over frequency band at any given temperature.

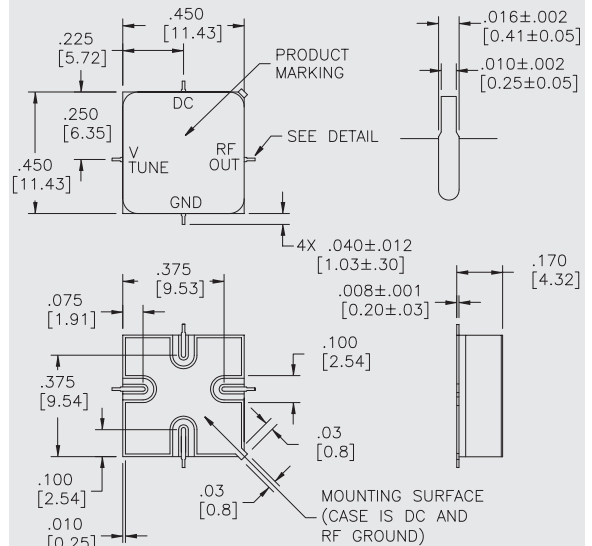
ABSOLUTE MAXIMUM RATINGS

Storage Temperature -62 °C to +125 °C
Maximum Case Temperature +125 °C
Maximum DC Voltage +8 V
Maximum Tuning Voltage +20 V
Burn-In Temperature +125 °C
Thermal Resistance¹ (θ_{jc}) +53.8 °C/Watt
Junction Temperature Rise Above Case (T_{jc}) +8.1 °C

¹ Thermal resistance is based on total power dissipation. Ratings based on +25 °C.

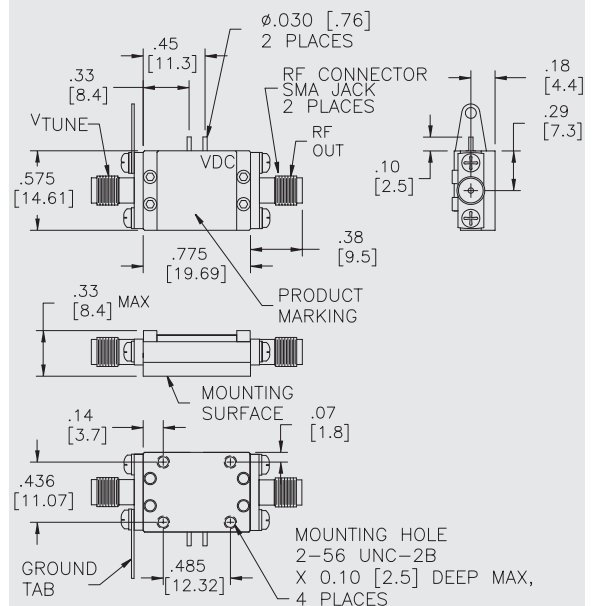
OS8900

SMTO-8 Package for Oscillators



OCP8900

CougarPak® Package for Oscillators



DIMENSIONS ARE IN INCHES [MILLIMETERS]