

OAS7700

5700 - 7700 MHz VOLTAGE CONTROLLED OSCILLATOR

Typical Values @ +25 °C

OAS7700

Tuning Voltage Limits	0-15 V
Power Output	+13.0 dBm
Power Output Variation	2.5 dB
Standard Size SMTO-8 Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency	5600-7800 MHz	5700-7700 MHz	5700-7700 MHz
Tuning Voltage Limits			
Tuning Voltage at low end	0 V	0 V	0 V
Tuning voltage at high end	15 V	15 V	15 V
Power Output (Min.)	+13.0 dBm	+10.0 dBm	+9.0 dBm
Power Flatness* (Max.)	2.5 dB	3.2 dB	3.5 dB
Modulation Sensitivity (Min.-Max.)	70 to 250 MHz/V	65 to 275 MHz/V	65 to 275 MHz/V
Modulation Sensitivity Ratio (Max.)	2.5:1	3.2:1	3.5:1
SSB Phase Noise (Max.)			
at 10 kHz offset	-75 dBc/Hz	-65 dBc/Hz	-65 dBc/Hz
at 100 kHz offset	-100 dBc/Hz	-95 dBc/Hz	-95 dBc/Hz
Frequency Drift (Max.)	—	150 MHz	175 MHz
Harmonics (Max.)	-28.0 dBc	-22.0 dBc	-22.0 dBc
Spurious (Max.)	-60.0 dBc	-60.0 dBc	-60.0 dBc
Frequency Pulling (Max.)			
Load VSWR = 1.67:1	0.50 MHz	1.5 MHz	1.5 MHz
Frequency Pushing (Max.)			
Vdc ± 0.5 V	10.0 MHz/V	17.0 MHz/V	18.0 MHz/V
Bias Voltage (Vdc)	5.0 V	5.0 V	5.0 V
DC Current (Max.)	95 mA	106 mA	106 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.

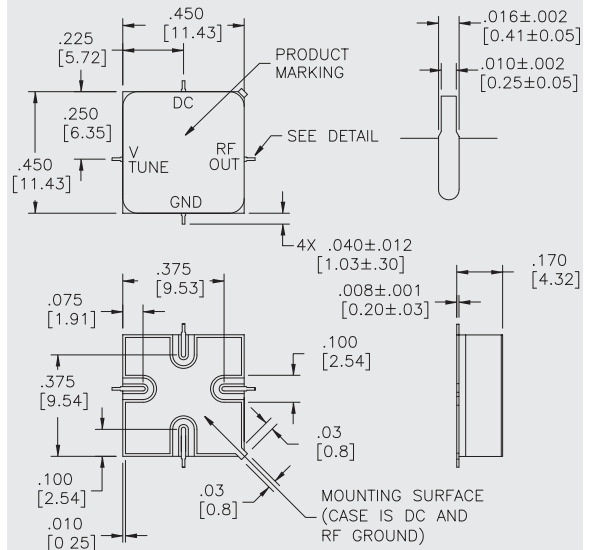
ABSOLUTE MAXIMUM RATINGS

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 Resistance ¹ (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.

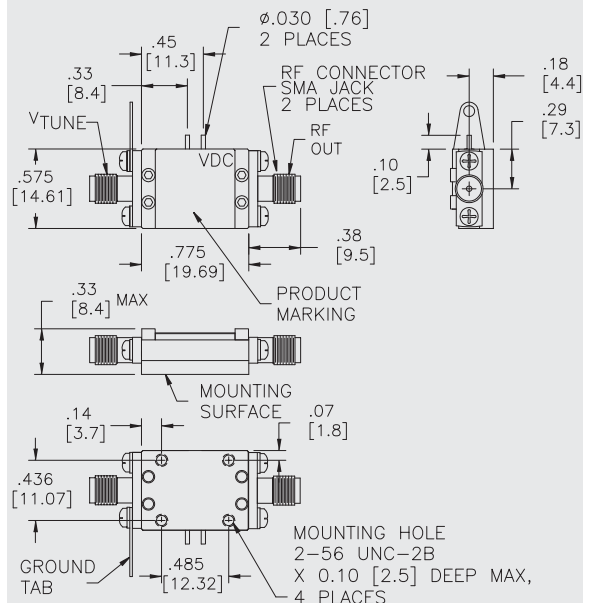
OAS7700

SMTO-8 Package for Oscillators



OACP7700

CougarPak™ Package for Oscillators



DIMENSIONS ARE IN INCHES [MILLIMETERS]