

## Features

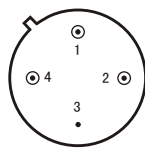
- Built-in buffer amplifier low frequency pulling
- Ultra low phase noise
- Flexible tuning design, custom frequency range  
300~4700MHz available bandwidth 10~30%
- Thin film hybrid construction
- TO-8D、SMO-8D、SP-1 packages available
- Operating temperature range: -55°C~+85°C

## Specifications (T<sub>A</sub>=25°C, V<sub>CC</sub>=+12V)

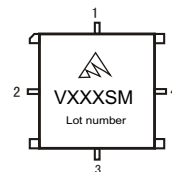
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	f <sub>L</sub> ~f <sub>H</sub>	MHz	1850~2050	—	V <sub>T</sub> : 0~15V
Power Output	P <sub>o</sub>	dBm	≥10	11	V <sub>T</sub> =5V
Power Output Variation	ΔP <sub>o</sub>	dB	≤±1.5	±1.0	f <sub>L-H</sub> : 1850~2050MHz
Tuning Voltage	V <sub>T</sub>	V	0~15	—	—
Pushing	K <sub>VC</sub>	MHz/V	—	2.0	V <sub>CC</sub> =11~13V, V <sub>T</sub> =5V
Spurious	R <sub>fs</sub>	dBc	≤-75	—	f <sub>L-H</sub> : 1850~2050MHz
Harmonics	R <sub>fn</sub>	dBc	—	-15	f <sub>L-H</sub> : 1850~2050MHz
SSB Phase Noise	S <sub>φ</sub>	dBc/Hz	—	-106	V <sub>T</sub> =5V, f <sub>m</sub> =10KHz
Frequency Drift	Δf	MHz	—	23.0	V <sub>T</sub> =5V, T <sub>A</sub> : -55~+85°C
Current	I <sub>CC</sub>	mA	—	65	—
Tuning Port Capacitance	C <sub>T</sub>	pF	—	45	—

## Absolute Ratings

Maximum DC Voltage : +15V  
 Maximum Tuning Voltage : +25V  
 Minimum Tuning Voltage : -0.7V  
 Maximum Storage Temp: +125°C



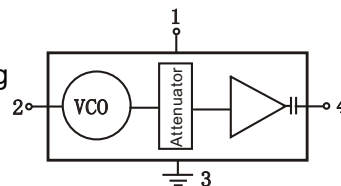
TO-8D



SMO-8D

## Application Notes

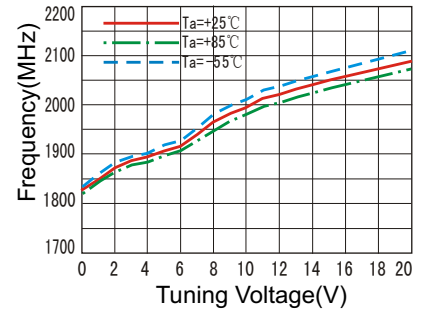
1. See assembly section for mounting information
2. ESD observe handling precautions



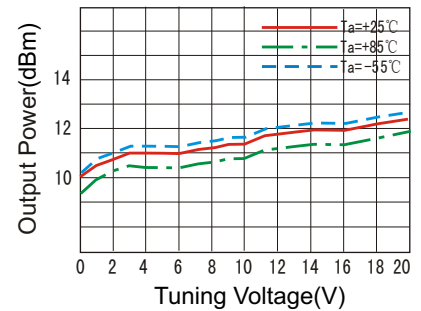
1. V<sub>CC</sub> 3. GND  
 2. V<sub>T</sub> 4. P<sub>o</sub>

## Typical Performance

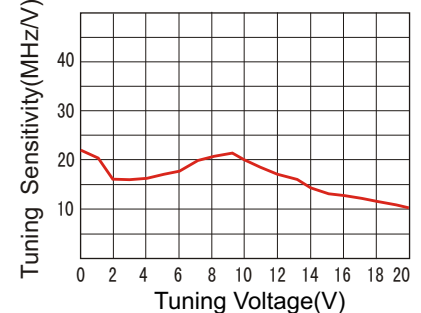
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

