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Voltage-Controlled Oscillator Surface Mount Module

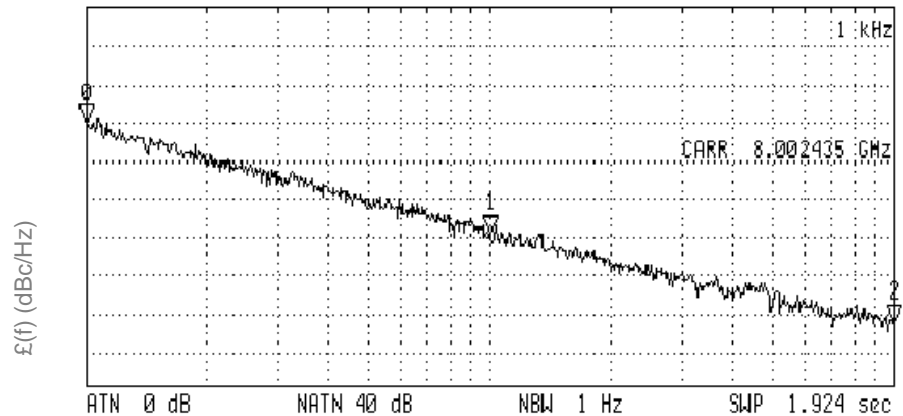
Applications

- Satellite Communications
- Wireless Communications
-

Application Notes

- AN-101: Mounting and Grounding
- AN-102: Output Loading
- AN-107: Manual Soldering

PHASE NOISE (1 Hz BW, typical)



Offset (Hz)	Phase Noise (dBc)
0 1 kHz	-70.89 dBc
1 10 kHz	-99.573 dBc
2 100 kHz	-123.36 dBc

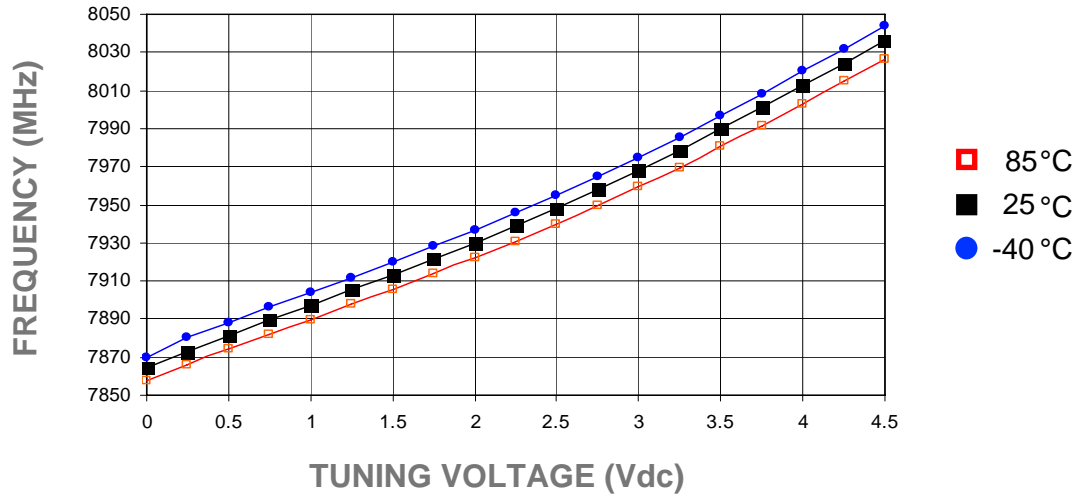
OFFSET (Hz)

Performance Specifications	Min	Typ	Max	Units
Oscillation Frequency Range	7890		8010	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-98		dBc/Hz
Harmonic Suppression (2nd)		-40	-30	dBc
Tuning Voltage	0.5		4.5	Vdc
Tuning Sensitivity (avg.)		42		MHz/V
Power Output	-4	.5	5	dBm
Load Impedance		50		Ω
Input Capacitance			50	pF
Pushing			2	MHz/V
Pulling (12 dB Return Loss, Any Phase)			.1	MHz
Operating Temperature Range	-40		85	$^{\circ}\text{C}$
Package Style		VCO-24H		

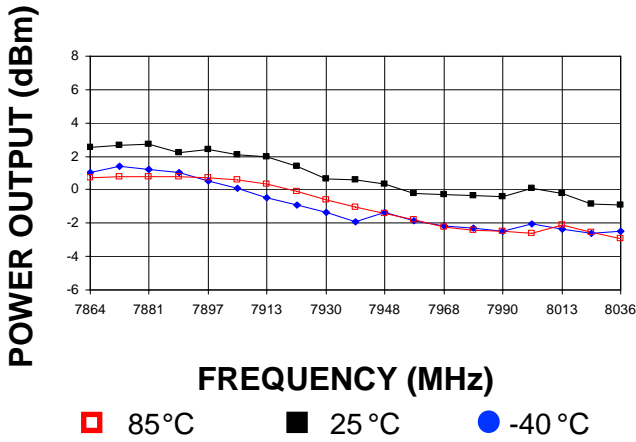
Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage (Vcc, nom.)		5		Vdc
Supply Current (Icc)		150	160	mA

Additional Notes

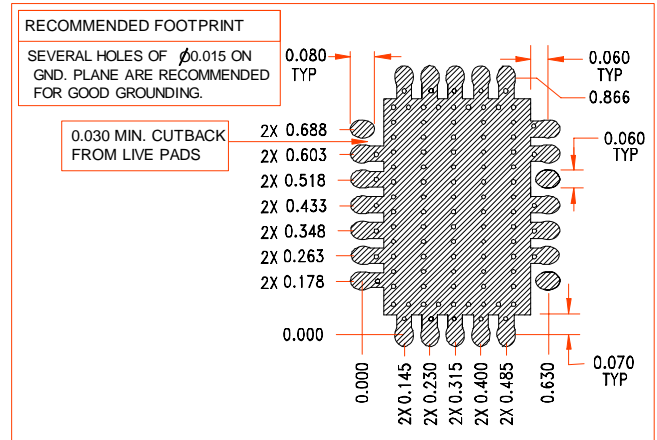
Tuning Curve, typ.



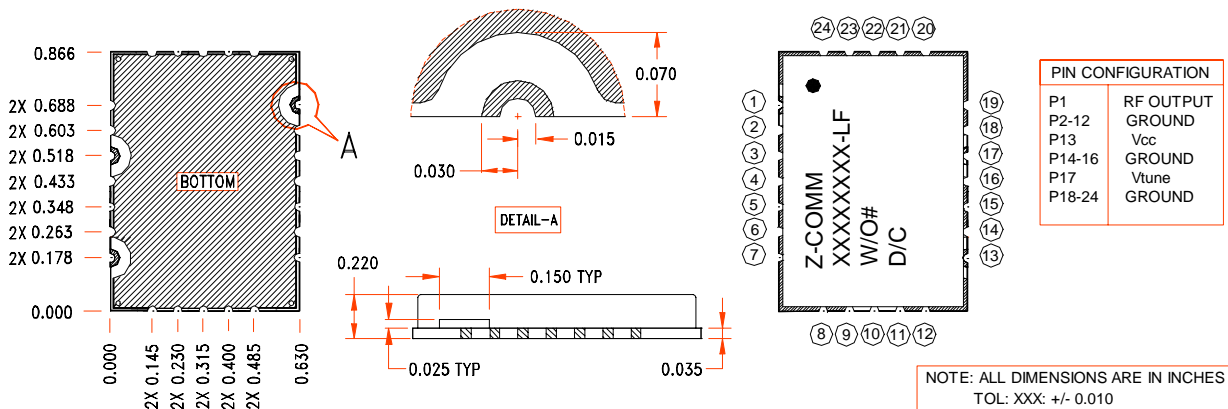
Power Curve, typ.



Footprint



Physical Dimensions



PIN CONFIGURATION	
P1	RF OUTPUT
P2-12	GROUND
P13	Vcc
P14-16	GROUND
P17	Vtune
P18-24	GROUND

NOTE: ALL DIMENSIONS ARE IN INCHES
TOL: XXX: +/- 0.010

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.