Z-Communications

V159MEM1

Rev B2

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Voltage-Controlled Oscillator
Surface Mount Module

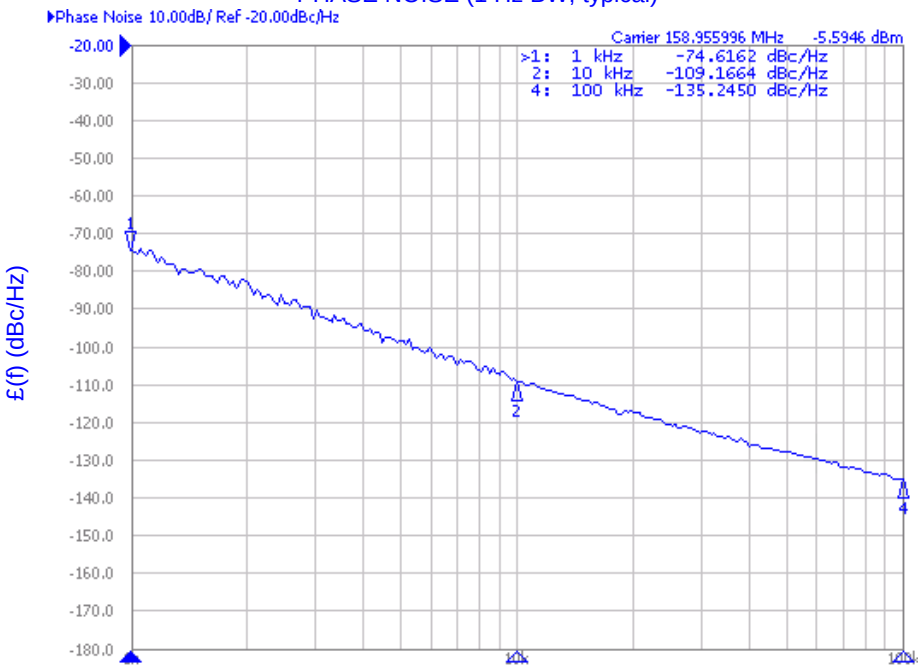
Applications

- Mobitex Radios
- RF Modems
- Satellite Communications

Application Notes

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

PHASE NOISE (1 Hz BW, typical)



Performance Specifications	Min	Typ	Max	Units
Oscillation Frequency Range	149		169	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-108		dBc/Hz
Harmonic Suppression (2nd)		-8	-7	dBc
Tuning Voltage	0.5		3	Vdc
Tuning Sensitivity (avg.)		14		MHz/V
Power Output	-3	0	3	dBm
Load Impedance		50		Ω
Input Capacitance			150	pF
Pushing			1	MHz/V
Pulling (14 dB Return Loss, Any Phase)			1	MHz
Operating Temperature Range	-40		85	°C
Package Style		MINI-16M-LOW		

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage (Vcc, nom.)		5		Vdc
Supply Current (Icc)		17	20	mA

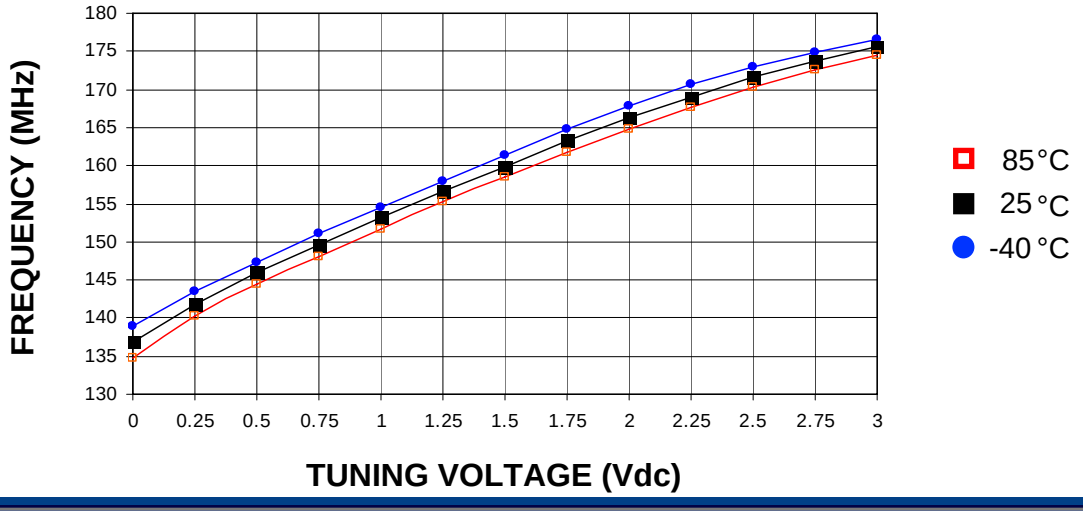
Additional Notes

MODULATION SENSITIVITY (avg.): 3.89 kHz/V

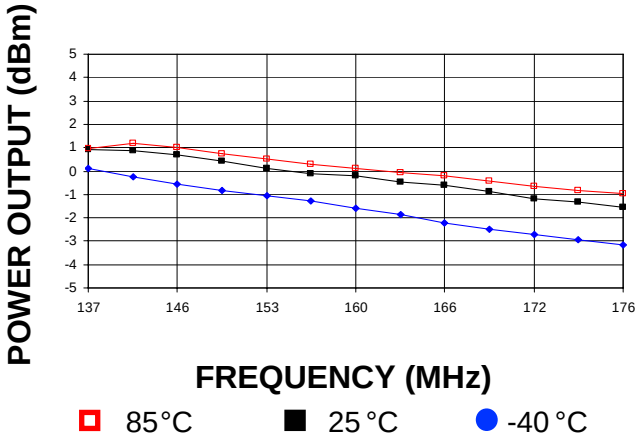
LFSuffix = RoHS Compliant. All specifications are subject to change without notice.

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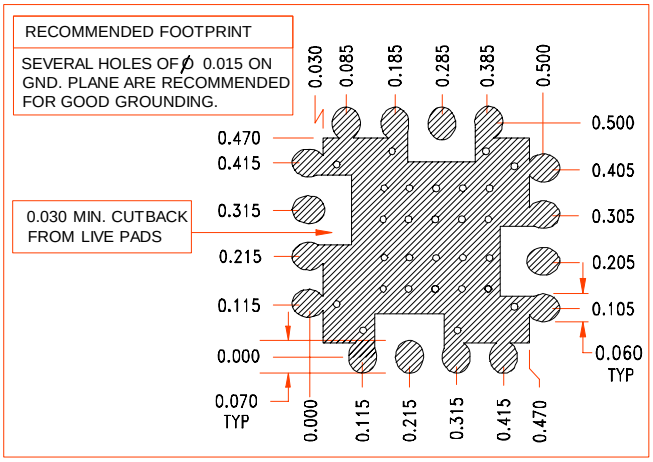
Tuning Curve, typ.



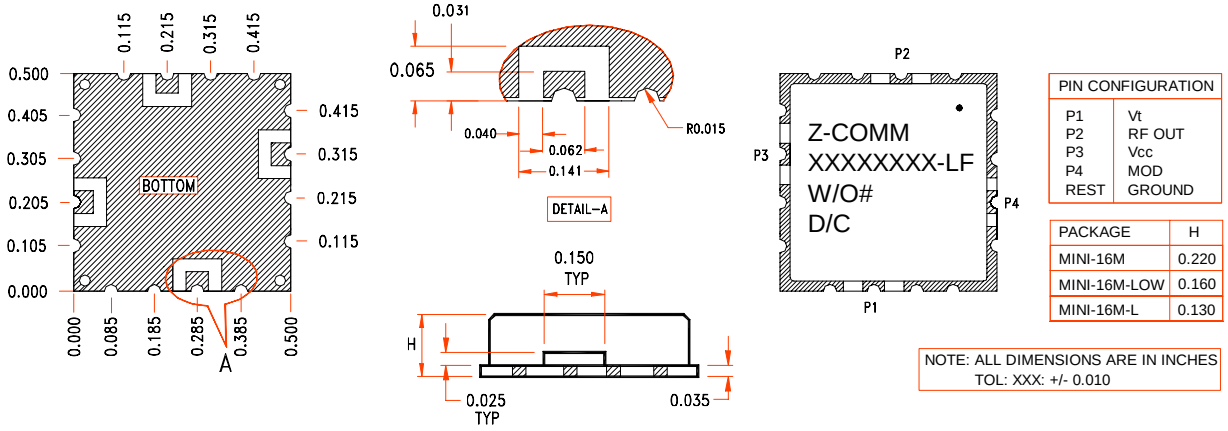
Power Curve, typ.



Footprint



Physical Dimensions



PIN CONFIGURATION	
P1	Vt
P2	RF OUT
P3	Vcc
P4	MOD
REST	GROUND

PACKAGE	H
MINI-16M	0.220
MINI-16M-LOW	0.160
MINI-16M-L	0.130

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

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