

9939 Via Pasar | San Diego, CA 92126  
 TEL: (858) 621-2700 | FAX: (858) 621-2722  
 URL: [www.zcomm.com](http://www.zcomm.com)  
 EMAIL: [applications@zcomm.com](mailto:applications@zcomm.com)

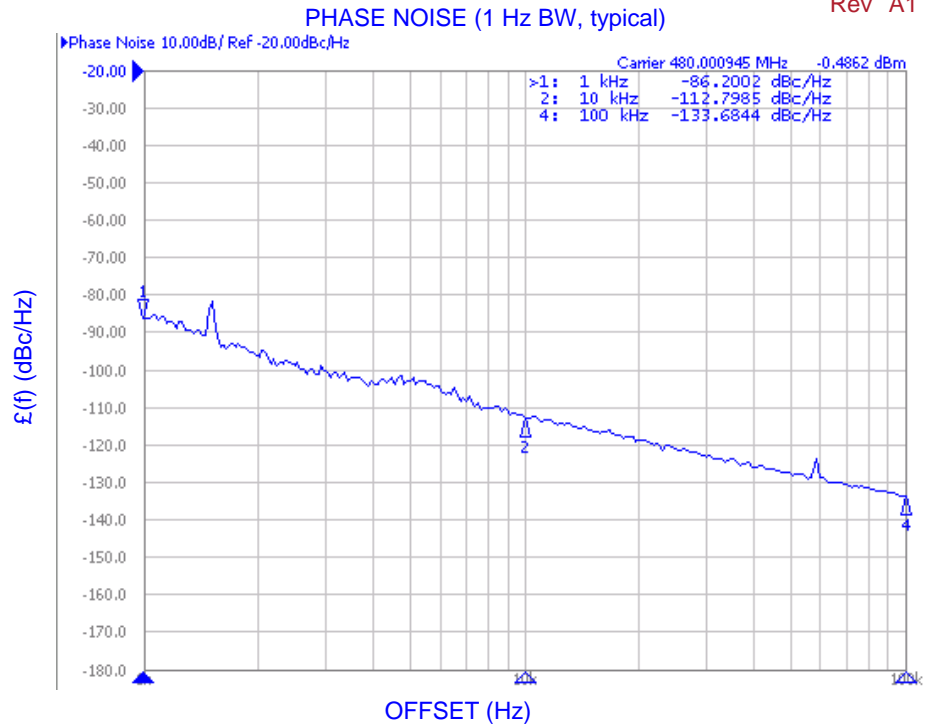
### Voltage-Controlled Oscillator Surface Mount Module

#### Applications

- Mobitex Radios
- RF Modems
- Satellite Communications

#### Application Notes

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



#### Performance Specifications

	Min	Typ	Max	Units
Oscillation Frequency Range	480		482	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-113		dBc/Hz
Harmonic Suppression (2nd)		-12	-10	dBc
Tuning Voltage	0.5		4.5	Vdc
Tuning Sensitivity (avg.)		25		MHz/V
Power Output	3.5	5	6.5	dBm
Load Impedance		50		$\Omega$
Input Capacitance			50	pF
Pushing			4	MHz/V
Pulling (14 dB Return Loss, Any Phase)			1	MHz
Operating Temperature Range	-40		85	$^{\circ}\text{C}$
Package Style	MINI-16M			

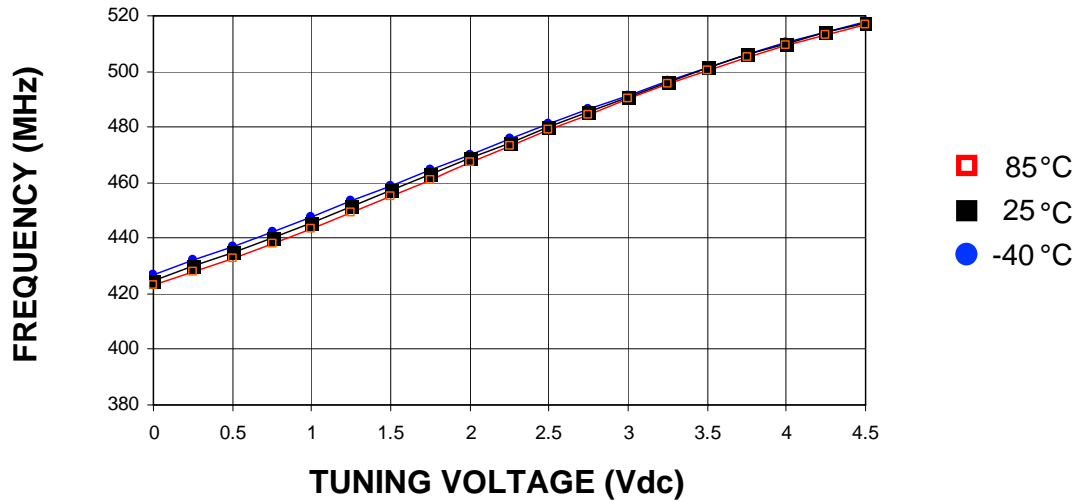
#### Power Supply Requirements

	Min	Typ	Max	Units
Supply Voltage (Vcc, nom.)		5.5		Vdc
Supply Current (Icc)		23	27	mA

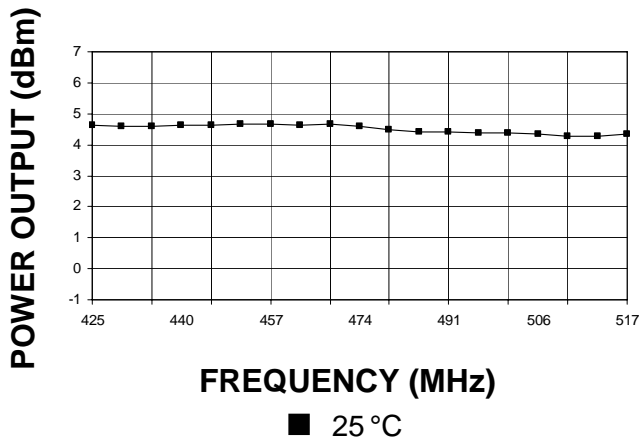
#### Additional Notes

Pin 4 is no-connect or ground.

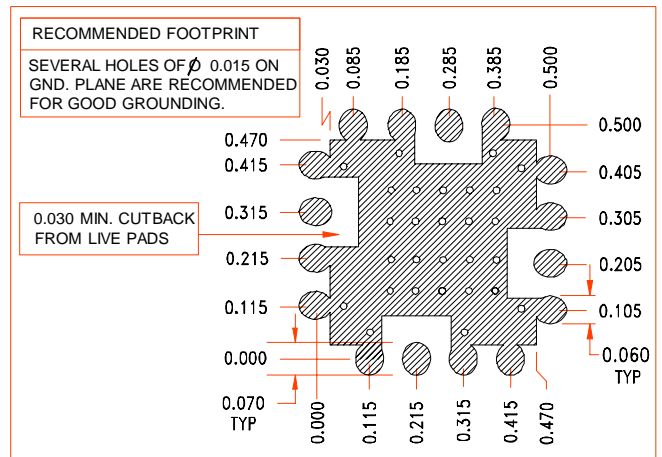
Tuning Curve, typ.



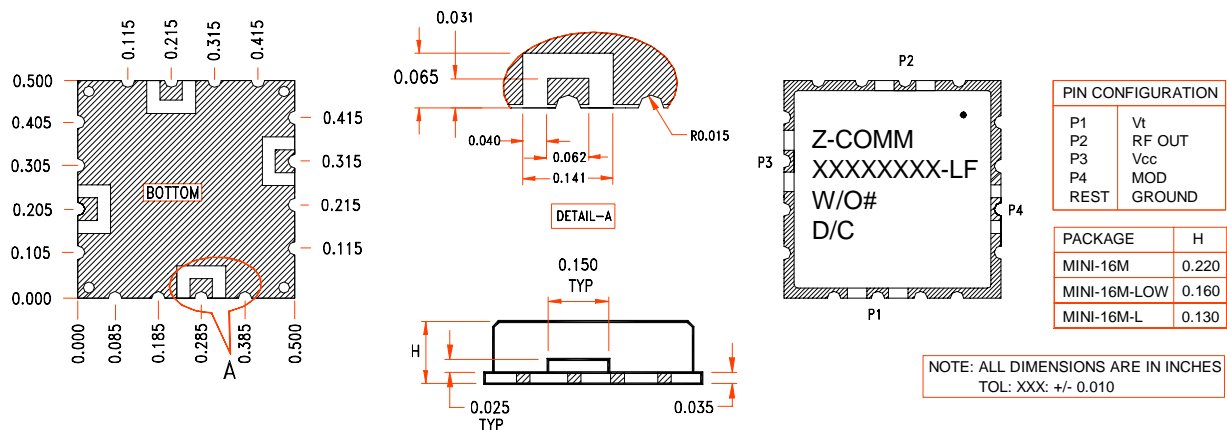
Power Curve, typ.



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

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