

14118 Stowe Drive, Suite B | Poway, CA 92064
 TEL: (858) 621-2700 | FAX: (858) 486-1927
 URL: www.zcomm.com
 EMAIL: applications@zcomm.com

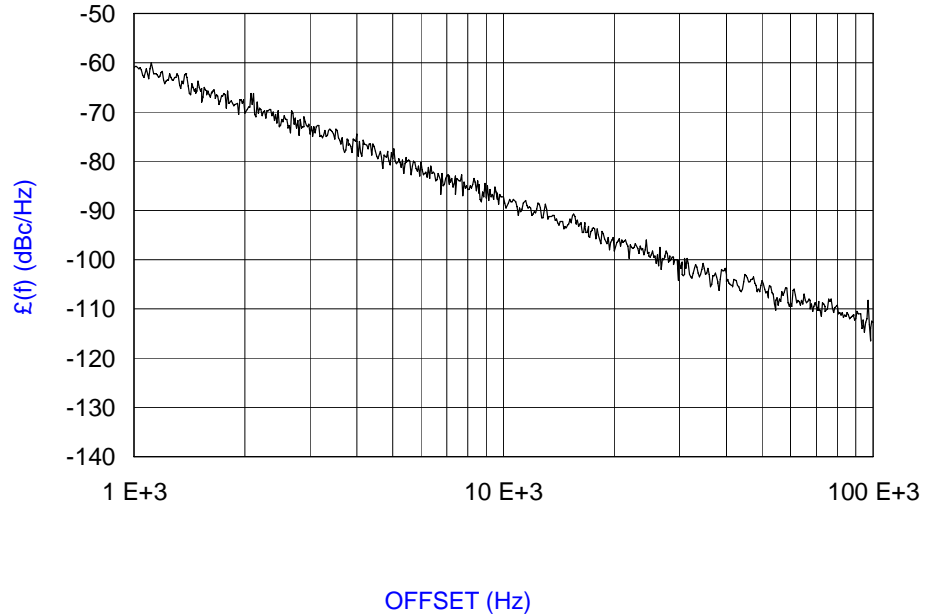
**Voltage-Controlled Oscillator
 Surface Mount Module**

Applications

- Direct Broadcast
- Satellite Up/Down Conversion
- Microwave Links

Application Notes

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



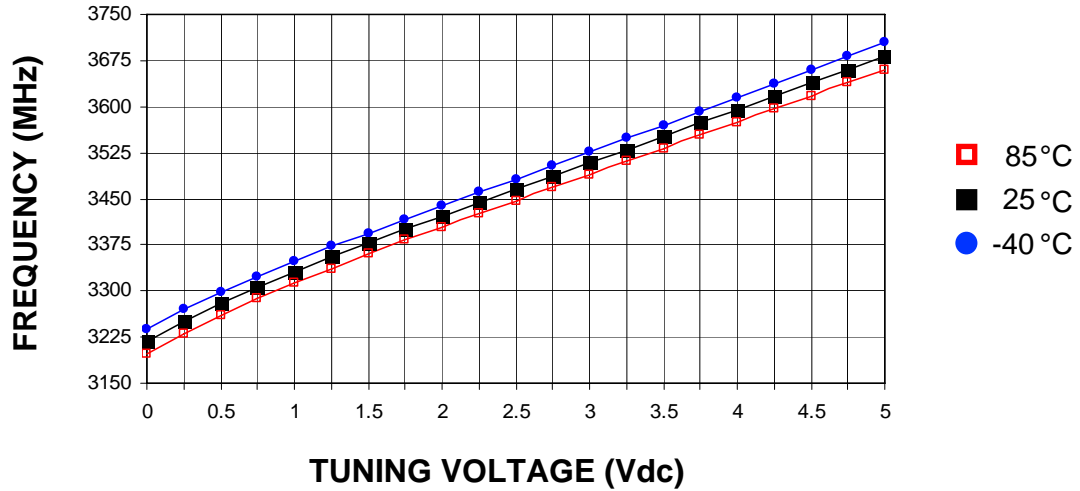
Performance Specifications	Min	Typ	Max	Units
Oscillation Frequency Range	3400		3600	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-88		dBc/Hz
Harmonic Suppression (2nd)		-15		dBc
Tuning Voltage	1.0		5.0	Vdc
Tuning Sensitivity (avg.)		94		MHz/V
Power Output	1	3	5	dBm
Load Impedance		50		Ω
Input Capacitance			50	pF
Pushing			1	MHz/V
Pulling (14 dB Return Loss, Any Phase)			6	MHz
Operating Temperature Range	-40		85	$^{\circ}\text{C}$
Package Style	MINI-14S-L			

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage (Vcc, nom.)		5		Vdc
Supply Current (Icc)		18	24	mA

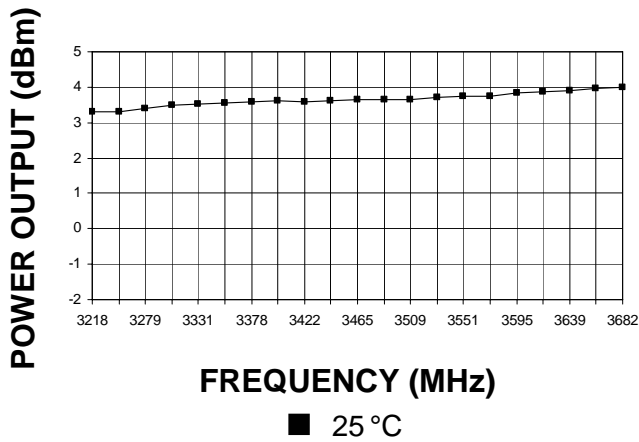
Additional Notes

Test Conditions: $V_{\text{tune}} = 1 \text{ Vdc} \dots F_{\text{out}} < 3370 \text{ MHz @ } 25^{\circ}\text{C}$
 $V_{\text{tune}} = 5 \text{ Vdc} \dots F_{\text{out}} > 3623 \text{ MHz @ } 25^{\circ}\text{C}$

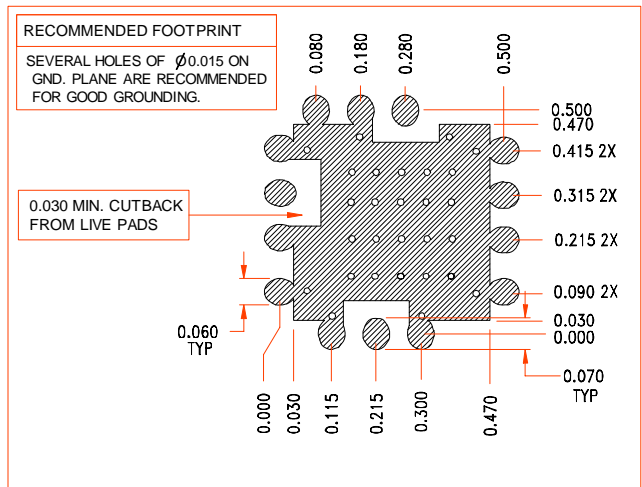
Tuning Curve, typ.



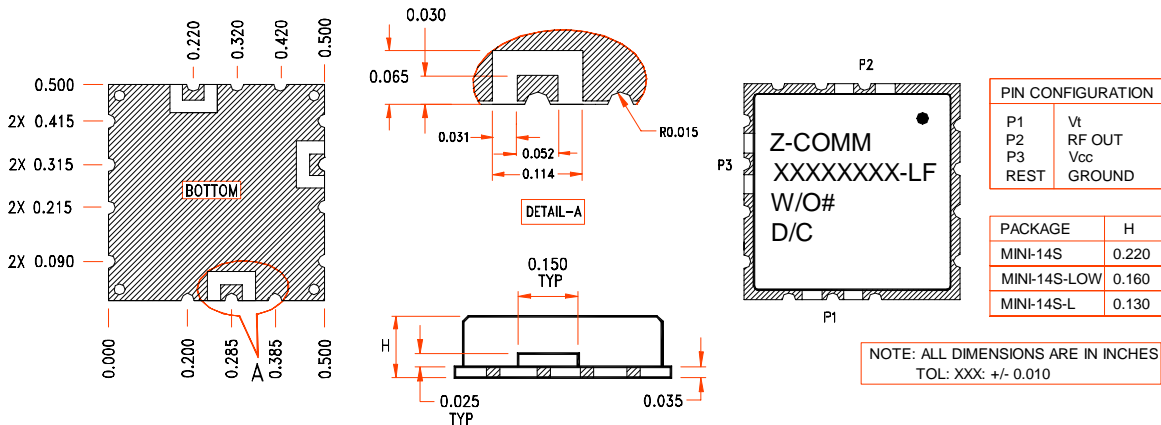
Power Curve, typ.



Footprint



Physical Dimensions



PIN CONFIGURATION	
P1	Vt
P2	RF OUT
P3	Vcc
REST	GROUND

PACKAGE	H
MINI-14S	0.220
MINI-14S-LOW	0.160
MINI-14S-L	0.130

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