Z-Communications, Inc.
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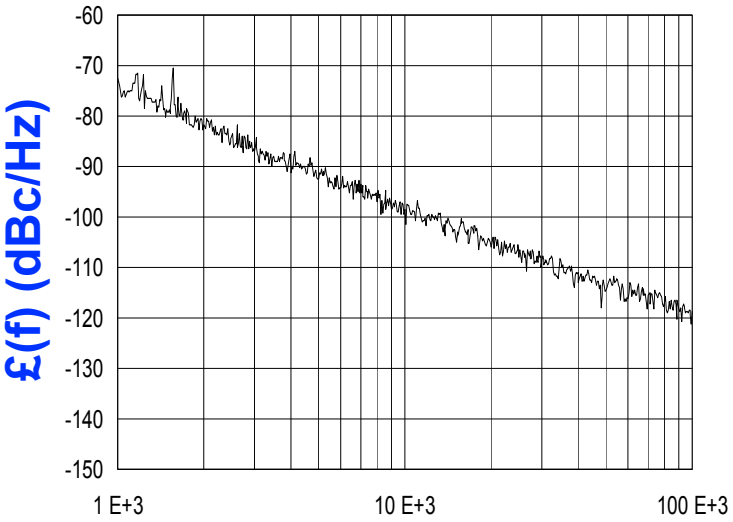
CRO8000Z

VOLTAGE CONTROLLED OSCILLATOR

Rev A1

PHASE NOISE (1 Hz BW, typical)



FEATURES

- Frequency Range: 7890 - 8010 MHz
- Tuning Voltage: 0.5-4.5 Vdc
- PLL-24H - Style Package

APPLICATIONS

- Satellite Communications
- Wireless Communications
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PERFORMANCE SPECIFICATIONS	VALUE	UNITS
Oscillation Frequency Range	7890 - 8010	MHz
Phase Noise @ 10 kHz offset (1 Hz BW, typ.)	-99	dBc/Hz
Harmonic Suppression (2nd, typ.)	-40	dBc
Tuning Voltage	0.5-4.5	Vdc
Tuning Sensitivity (avg.)	42	MHz/V
Power Output	0.5±3.5	dBm
Load Impedance	50	Ω
Input Capacitance (max.)	50	pF
Pushing	<2	MHz/V
Pulling (14dB Return Loss, Any Phase)	<0.5	MHz
Operating Temperature Range	-40 to 85	°C
Package Style	PLL-24H	
POWER SUPPLY REQUIREMENTS		
Supply Voltage (Vcc, nom.)	5	Vdc
Supply Current (Icc, typ.)	149	mA

All specifications are typical unless otherwise noted and subject to change without notice.

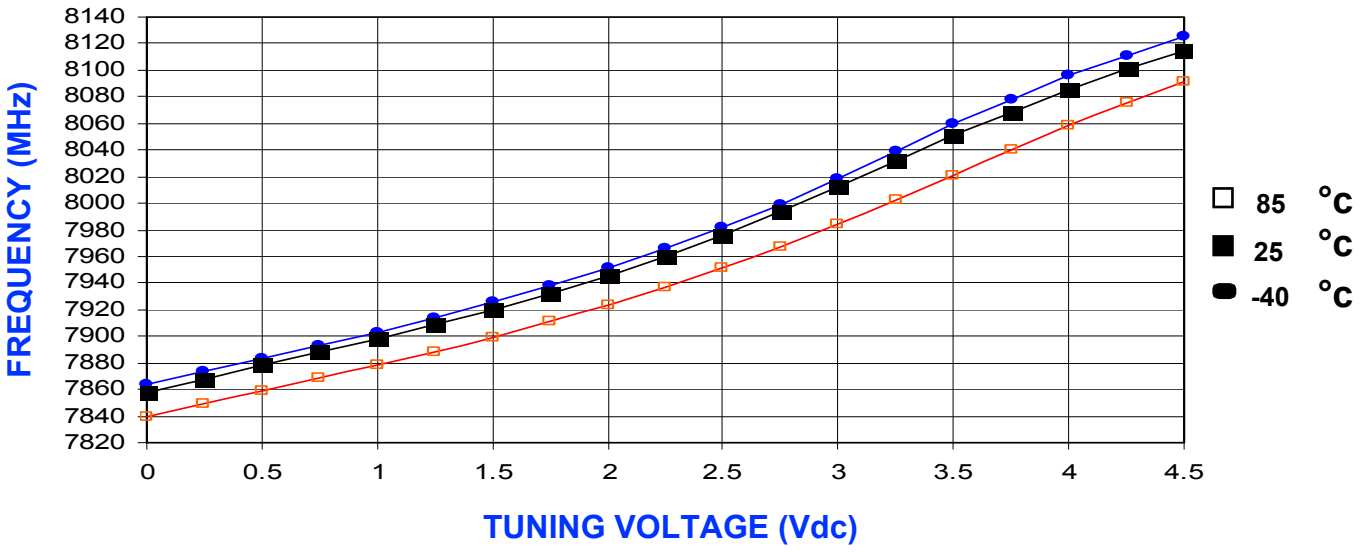
APPLICATION NOTES

- AN-100/1 : Mounting and Grounding of VCOs
- AN-102 : Proper Output Loading of VCOs
- AN-107 : How to Solder Z-COMM VCOs

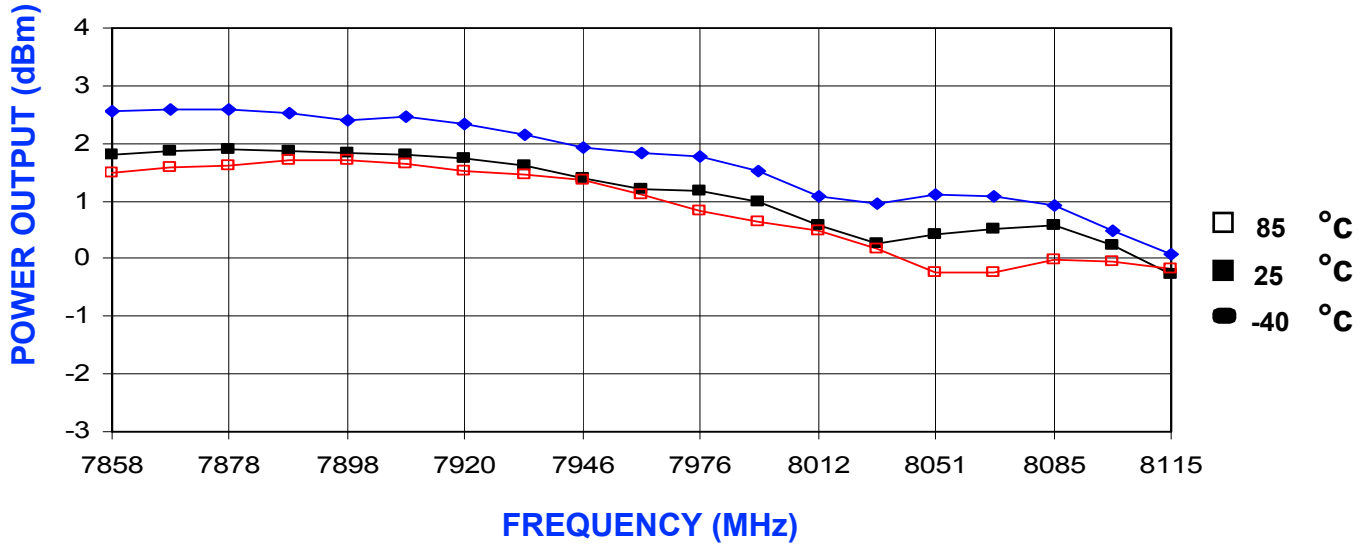
NOTES:

LOW COST - HIGH PERFORMANCE

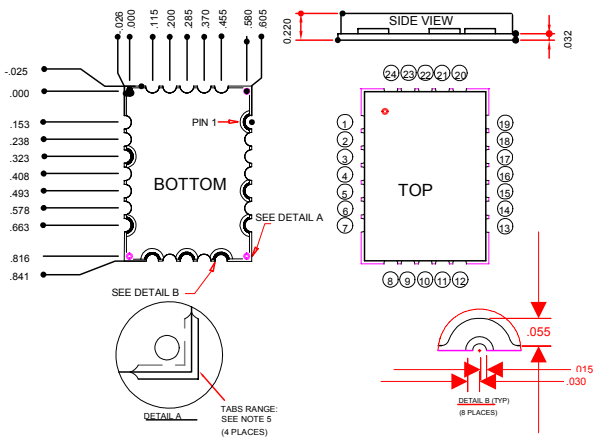
TUNING CURVE, typ.



POWER CURVE, typ.



PHYSICAL DIMENSIONS



1. The inside radius of all 24 half holes at the perimeter of the board are plated to provide a surface for the attachment of the PLL Module to the PCB. 16 pads are for grounding, 8 pads are for signal interface.
2. The surface of the shield is tin-plated and may be soldered to. The shield's base metal is cold-rolled steel.
3. The ground plane on the bottom side is ground and attaches to a ground track on the top side of the board as well as to the shield.
4. Unless otherwise noted all dimensions are in inches.
5. Unless otherwise noted all tolerances are as follows: .xxx = ± .010.

P1	RF OUTPUT
P2-4	GROUND
P5	REFERENCE OSCILLATOR INPUT
P6	GROUND
P7	CLOCK
P8	DATA
P9	GROUND
P10	LOAD ENABLE
P11	GROUND
P12	LOCK DETECT
P13	VCC
P14	GROUND
P15	GROUND
P16	GROUND
P17	NO CONNECTION
P18-24	GROUND

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