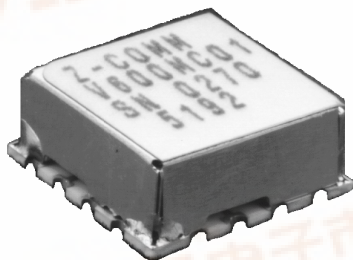


V440MC01

VOLTAGE CONTROLLED OSCILLATOR

Rev C4



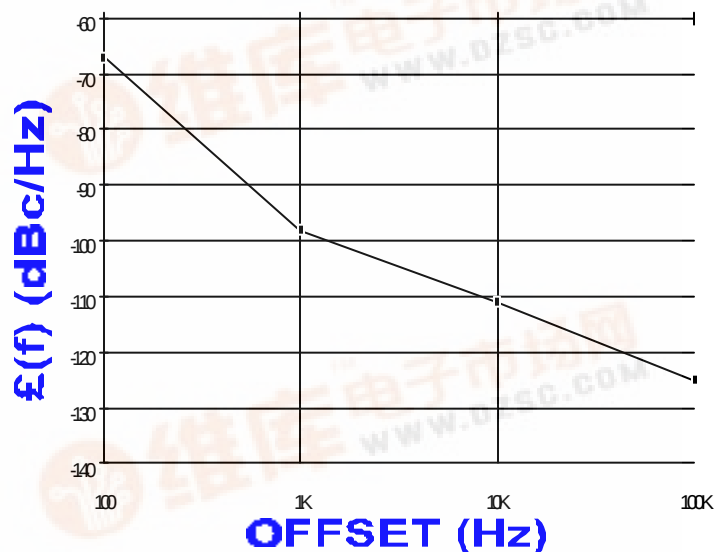
FEATURES

- Frequency Range: 370 - 515 MHz
- Tuning Voltage: 0-8 Vdc
- MINI-14S - Style Package

APPLICATIONS

- VHF Radios
- Test Instrumentation
- Mobile Radios

PHASE NOISE (1 Hz BW, typical)



PERFORMANCE SPECIFICATIONS

	VALUE	UNITS
Oscillation Frequency Range	370 - 515	MHz
Phase Noise @ 10 kHz offset (1 Hz BW, typ.)	-107	dBc/Hz
Harmonic Suppression (2nd, typ.)	-4	dBc
Tuning Voltage	0-8	Vdc
Tuning Sensitivity (avg.)	40	MHz/V
Power Output	10 ± 4	dBm
Load Impedance	50	Ω
Input Capacitance (max.)	200	pF
Pushing	<2	MHz/V
Pulling (14 dB Return Loss, Any Phase)	<1	MHz
Operating Temperature Range	0 to 70	°C
Package Style	MINI-14S	

POWER SUPPLY REQUIREMENTS

Supply Voltage (Vcc, nom.)	10	Vdc
Supply Current (Icc, typ.)	16	mA

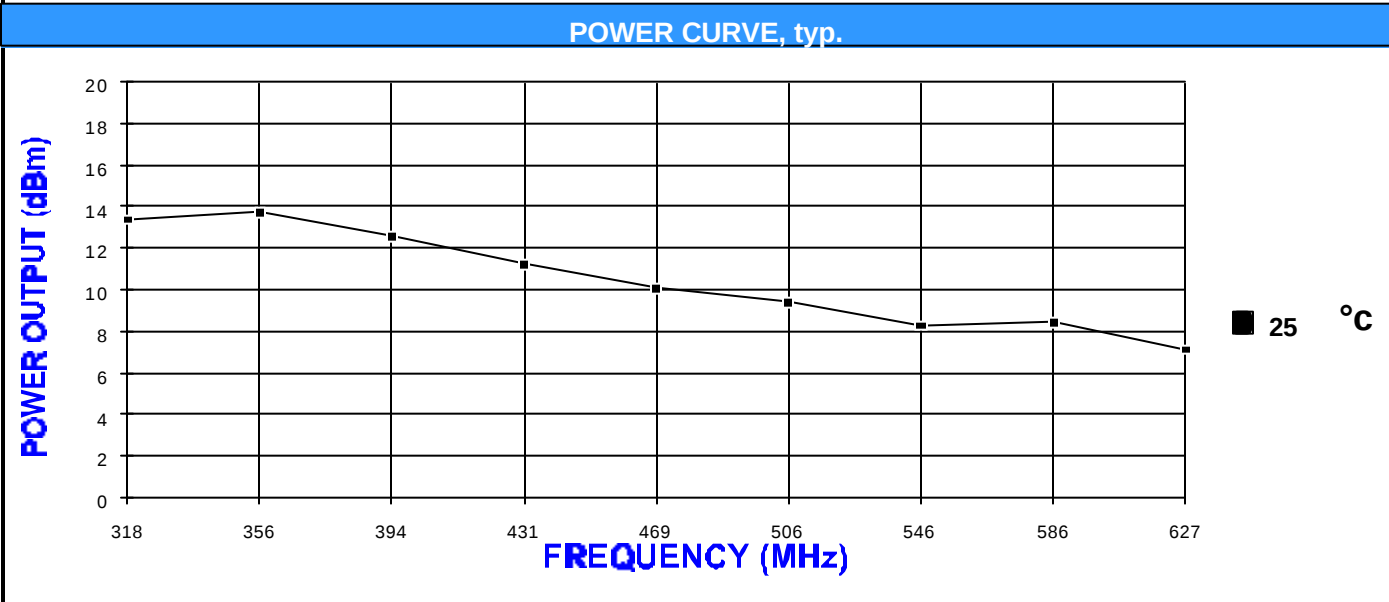
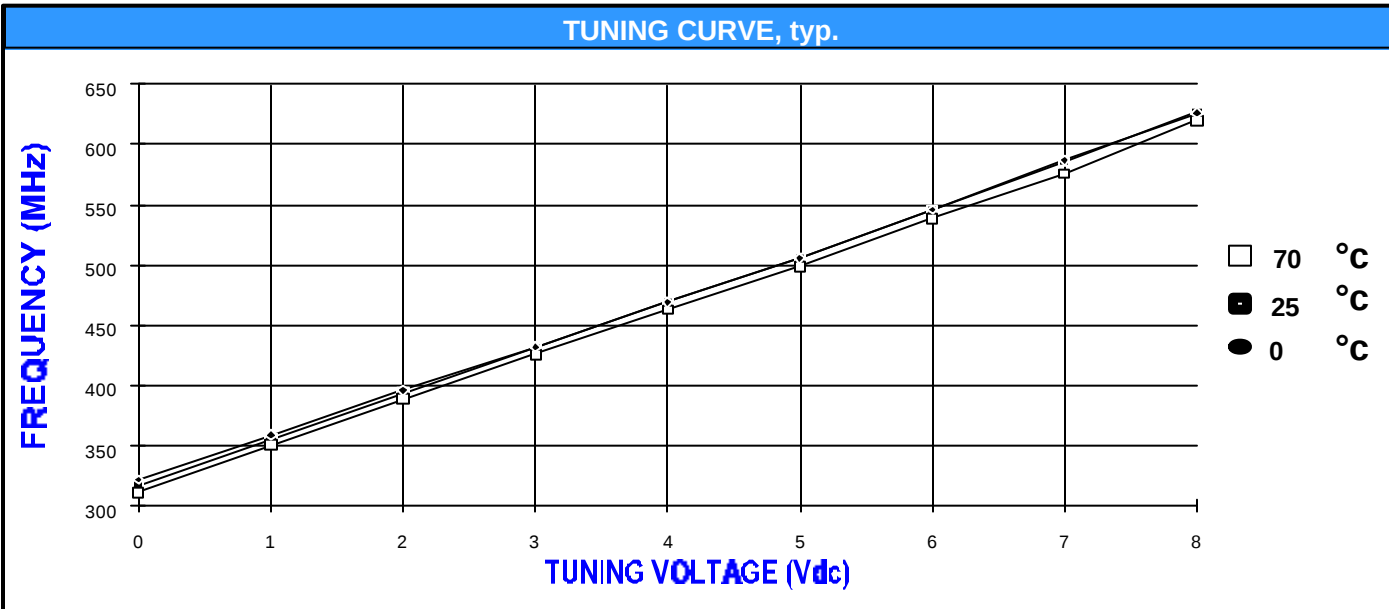
All specifications are typical unless otherwise noted and subject to change without notice.

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
VOLTAGE CONTROLLED OSCILLATOR



PHYSICAL DIMENSIONS

MINI-14S
415-0062 REV. B
(DRAWING NOT TO SCALE)

GROUND PLANE SOLDER PLATED

DETAIL A

TABS RANGE FROM
0.006-0.010
(4 PLACES)

TYPICAL OF ALL PADS

SEE DETAIL 'A'

SEE NOTE 3

NOTES:

1. THE INSIDE RADIUS OF ALL 14 HALF HOLES AT THE PERIMETER OF THE BOARD ARE SOLDER PLATED TO PROVIDE A SURFACE FOR THE ATTACHMENT OF THE VCO TO A MOTHERBOARD, IN 11 LOCATIONS, WITH 3 PADS BEING USED FOR ELECTROMECHANICAL INTERFACE, 14 SOLDER LOCATIONS REQUIRED. THE SURFACE OF THE SHIELD IS TIN PLATED AND MAY BE SOLDERED TO THE SHIELD'S BASE METAL IS BRASS.
2. THE GROUND PLANE IS GROUND AND ATTACHES TO A GROUND TRACK ON THE UPPER SIDE OF THE BOARD AS WELL AS THE SHIELD BY PTH.
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES.
4. UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS FOLLOWS:
TOLERANCES
.XXX = ± .010
5. UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS FOLLOWS:
TOLERANCES
.XXX = ± .010

P1=VT
P2=RF OUT
P3=VCC

.005
.020
.034
0.000
.150 TYP
.070 TYP
.465