

FEATURES   • Frequency Range: 1640 - 1700 MHz   • Tuning Voltage: 0.5-4.5 Vdc   • MINI-16-L - Style Package   APPLICATIONS   • Digital Radios   • Basestations   • Mobile Communications	PHASE NOISE (1 )	Image: with the second secon
PERFORMANCE SPECIFICATIONS	VALUE	UNITS
Oscillation Frequency Range	1640 <sup>-</sup> 1700	MHz
Phase Noise @ 10 kHz offset (1 Hz BW, typ.)	-111	dBc/Hz
Harmonic Suppression (2nd, typ.)	-21	dBc
Tuning Voltage	0.5-4.5	Vdc
Tuning Sensitivity (avg.)	30	MHz/V
Power Output	2.5±2.5	dBm
Load Impedance	50	Ω
Input Capacitance (max.)	50	pF
Pushing	<1.5	MHz/V
Pulling (14 dB Return Loss, Any Phase)	<1	MHz
Operating Temperature Range	-40 to 85	°C
Package Style	MINI-16-L	
POWER SUPPLY REQUIREMENTS		
Supply Voltage (Vcc, nom.)	5	Vdc
Supply Current (Icc, typ.)	23	mA
All specifications are typical unless other	erwise noted and subject to change without not	ice.
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

**TUNING CURVE**, typ. 1800 1775 1750 FREQUENCY (MHz) 1725 1700 °C □ 85 1675 °C 25 1650 °C -40 1625 1600 1575 1550 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 **TUNING VOLTAGE (Vdc) POWER CURVE**, typ. POWER OUTPUT (dBm) 6 5 4 3 °c 2 25 1 0 -1 1591 1608 1624 1639 1654 1669 1684 1700 1716 1733 **FREQUENCY (MHz)** PHYSICAL DIMENSIONS TYPICAL OF ALL PADS SEE NOTE 3 MINI-16-L 415-0061 REV. D (DRAWING NOT TO SCALE) .070 03 NOTES: NOTES: THE INSIDE RADIUS OF ALL 16 HALF HOLES AT THE DESIMETER OF THE BOARD ARE PLATED TO PROVIDE A SUFFACE FOR THE ATTACHMENT OF THE VCO TO A PCB. IN 13 LOCATIONS, WITH 3 HOADS BEING USED FOR ELECTROMECHANICAL INTERFACE. 16 SOLDER DE COLTROM STEULD IS TIM PLATED AND MAY BE SOLDERED TO THE SHIELD'S BASE METAL IS COLD ROLLED STEEL. THE GROUND PLANE IS GROUND AND ATTACHES THE GROUND PLANE IS GROUND AND ATTACHES THE GROUND FLANE SOLD ROLLED STEEL. THE GROUND AND ATTACHES THE GROUND RULAE STEEL. THE GROUND RULAE STEEL. THE GROUND AND ATTACHES THE GROUND RULAE STEEL. THE STEEN WISE NOTED ALL DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS FOLLOWS: -.031 1. .031 .026 -0.475 0.220 -0.320 -0.420 000 .114 TABS RANGE: 0.500 0.475 2. नुम् SEE NOTE 5. DETAIL A (4 PLACES) 0.415 0.405 3. P1=VT P2=RF OUT P3=Vcc E - 0.315 P3 0.305 5. 005 0.205 65 - 0.215 ARE AS FOLLOWS: TOLERANCES BOTTOM VIEW .XXX= ± .010 0.105 0.115 .130 SEE DETAIL 'A' .070 TYP 0.025 0.000 034 1주1 0.000 .150 TYP 0.025 0.085 .185 0.285 0.385 0.500 GRC

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