

VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO615712-5

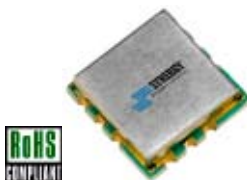
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OPTIMIZED BANDWIDTH

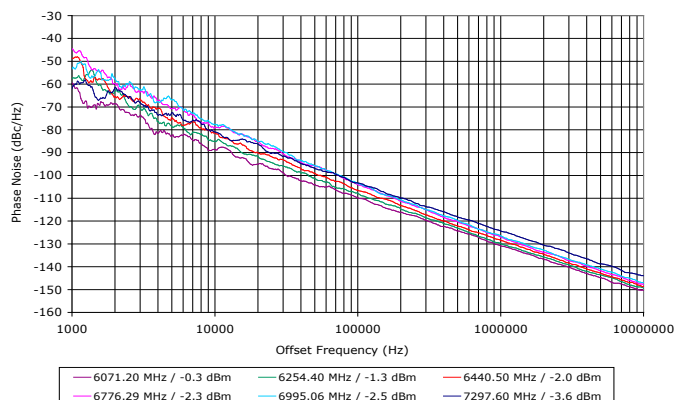
6150 - 7120 MHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Fast Tuning
- ▶ Small Size, Surface Mount
- ▶ Lead Free REL-PRO® Technology



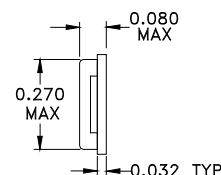
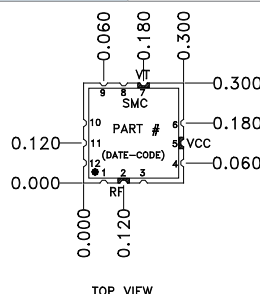
Phase Noise



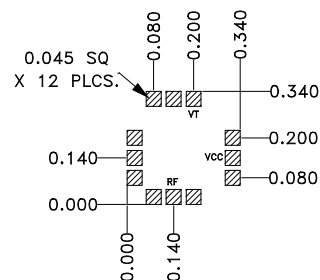
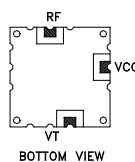
SPECIFICATIONS

Frequency	6150 - 7120 MHz	
Tuning Voltage	See table below.	
Bias Voltage	+5 VDC @ 22 mA (Max.)	
Output Power	-5 dBm (Min.)	
Tuning Sensitivity	50 - 110 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	25 dB (Typ.)	
Frequency Pulling	12 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	12 MHz/V (Typ.)	
Tuning Port Capacitance	10 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-85
	100 kHz	-106
Operating Temperature Range	-40 to +85 °C	

Package # 343



RECOMMENDED PCB LAYOUT



DIMENSIONS ARE IN INCHES.

TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
ALL UNLABELED PINS TO BE GROUNDED.
PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	6150 (Max.)
5	6230 (Min.)
8	6500 (Min.)
12	6650 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+20 V
DC Voltage Applied to RF Out	± 25 V

This product is manufactured under one or more of the following patents: Approved: 5,183,810; 5,122,621; 5,330,346; 5,416,446; 5,650,754; 5,805,431; 6,325,623; 6,856,573; 7,088,189; 7,180,381; 7,185,591; 7,262,670; 7,265,642; 7,292,113
Pending: 65/48,307; 65/50,137; 65/58,179; 65/57,957; 65/53,675; 65/53,481; 65/54,173; 65/58,083; 65/61,822; 65/60,579; 65/31,268/034; 65/29,768; 65/62,485; 65/71,031; 65/37,325/60/736/01; 65/73,737

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301 McLean Boulevard • Paterson, New Jersey 07654 • Tel: (973) 881-8800 • Fax: (973) 881-8361
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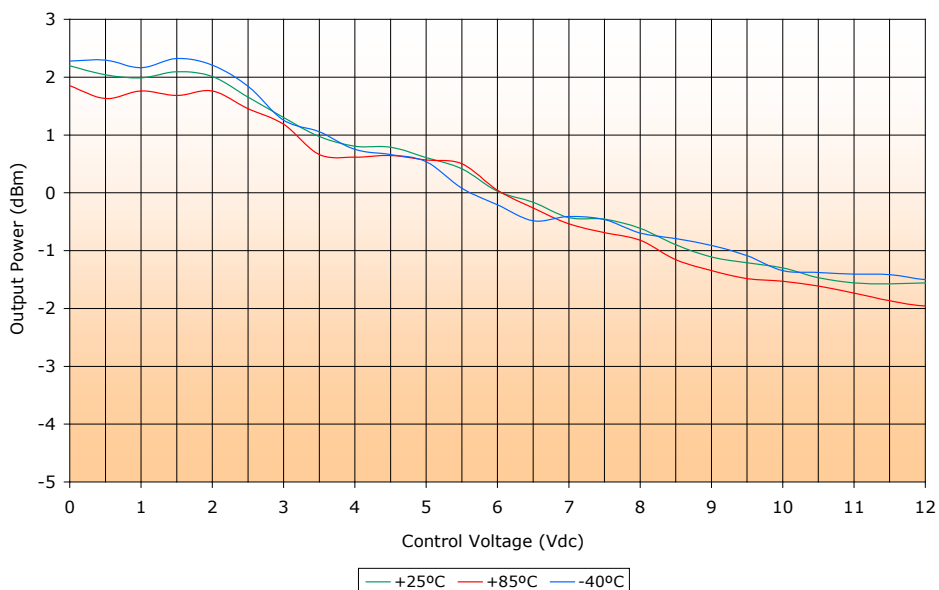
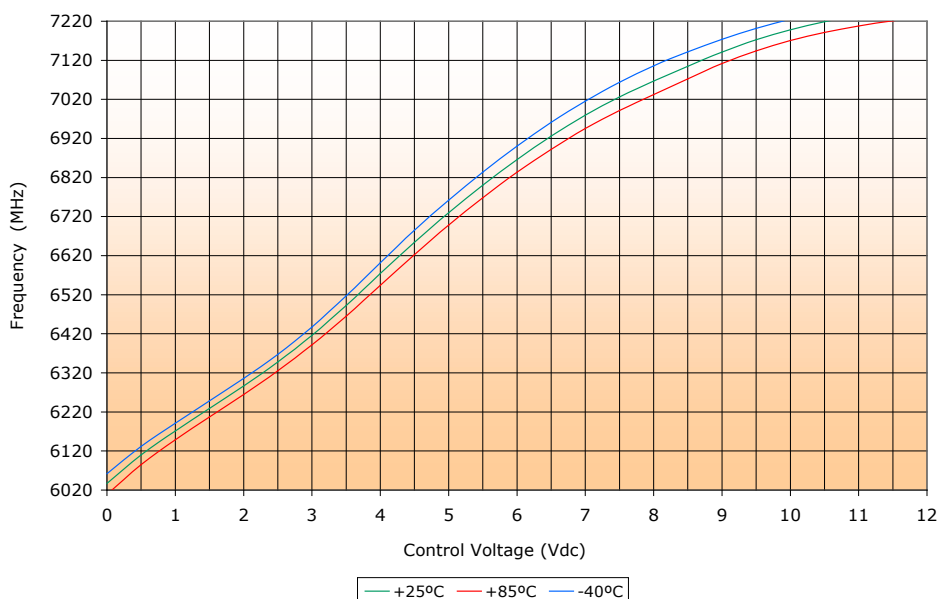
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OPTIMIZED BANDWIDTH

6150 - 7120 MHz

PERFORMANCE PLOTS



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 Pending: 66/48,307; 60/501,371 & 66/581,796; 60/507,957 & 66/538,675; 60/563,481; 60/564,173; 60/580,083; 60/601,822; 60/605,791; 20/312,680/34;
 14,259,768; 60/623,485 & 66/710,212; 10/607,325/60/736,901; 60/730,787

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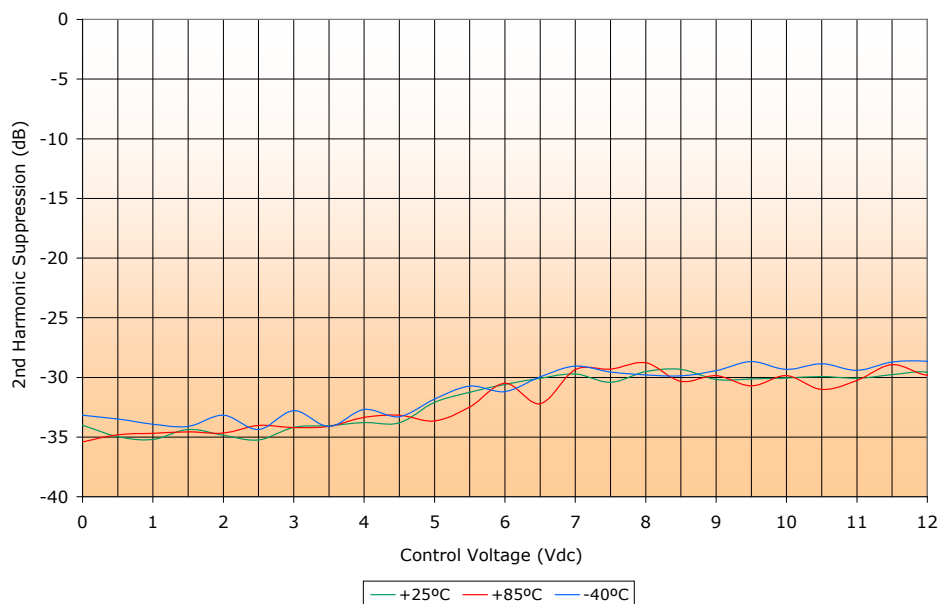
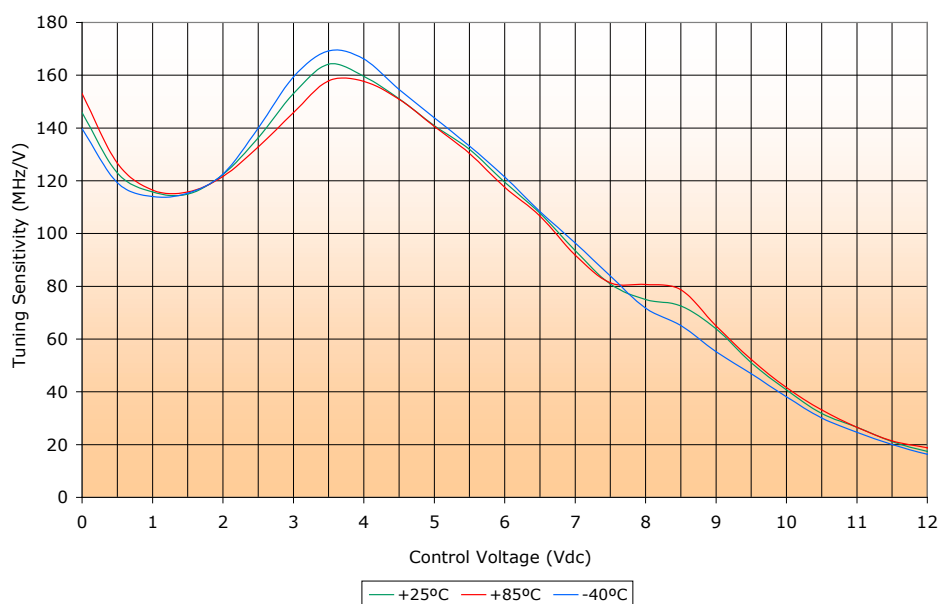
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