

# VOLTAGE CONTROLLED OSCILLATOR

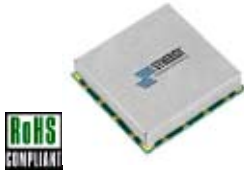
## SURFACE MOUNT MODEL: DCRO4450-5

OPTIMIZED BANDWIDTH

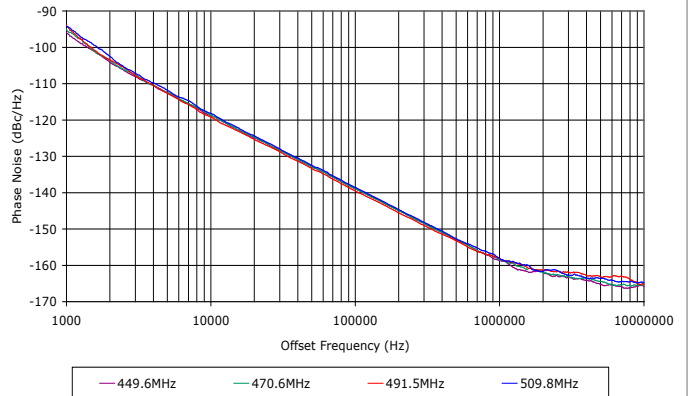
445 - 510 MHz

**FEATURES:**

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size, Surface Mount
- ▶ Lead Free REL-PRO® Technology
- ▶ Planar Resonator Construction



**Phase Noise**



**SPECIFICATIONS (Rev. B 04/23/09)**

Frequency	445 - 510 MHz
Tuning Voltage	See table below.
Bias Voltage	+5 VDC @ 28 mA (Max.)
Output Power	-4 dBm (Min.) / -2 dBm (Max.)
Tuning Sensitivity	16 - 21 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	15 dB (Typ.)
Frequency Pulling	0.05 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	0.1 MHz/V (Typ.)
Tuning Port Capacitance	100 pF (Typ.)
Phase Noise @ 10 kHz	-118 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

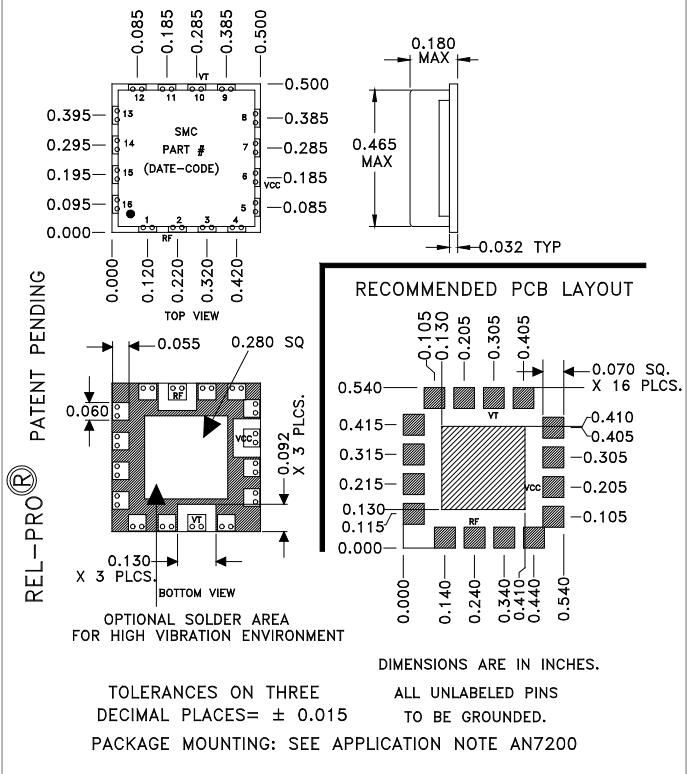
**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	445 (Max.)
4.5	510 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+7 V
DC Voltage Applied to RF Out	± 25 V

Package # 278LF



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

This product is manufactured under one or more of the following patents: Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113  
 Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787

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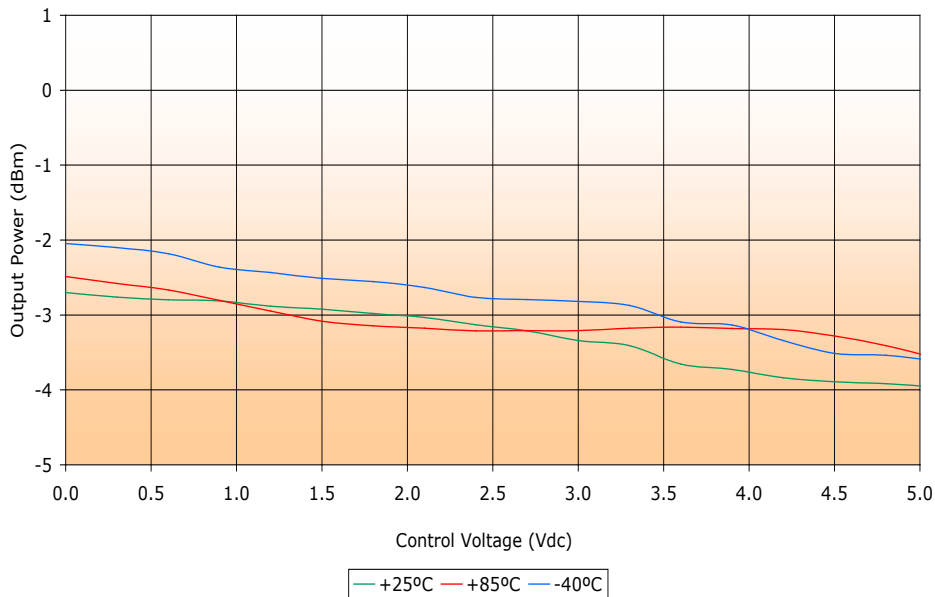
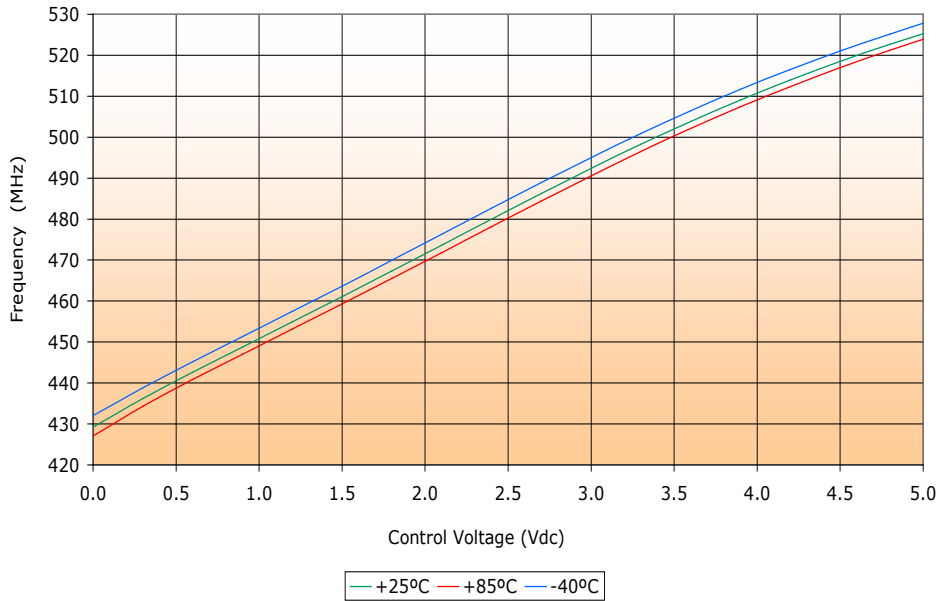


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OPTIMIZED BANDWIDTH

445 - 510 MHz

PERFORMANCE PLOTS



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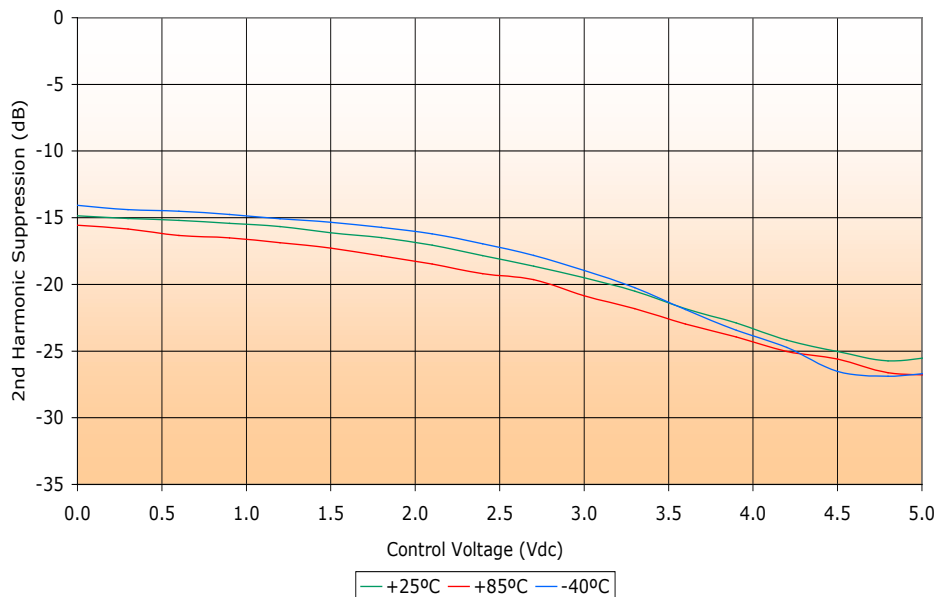
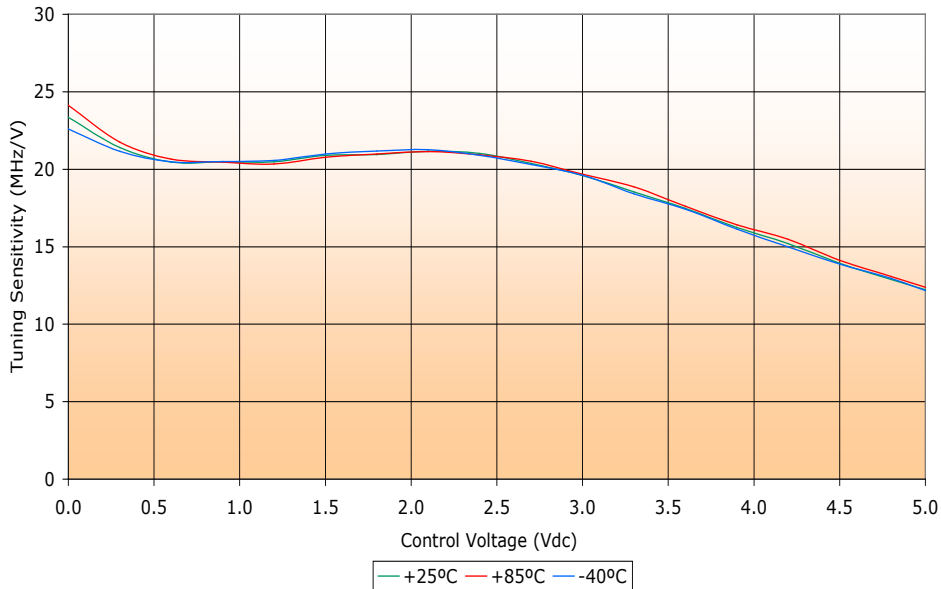
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