

# VOLTAGE CONTROLLED OSCILLATOR

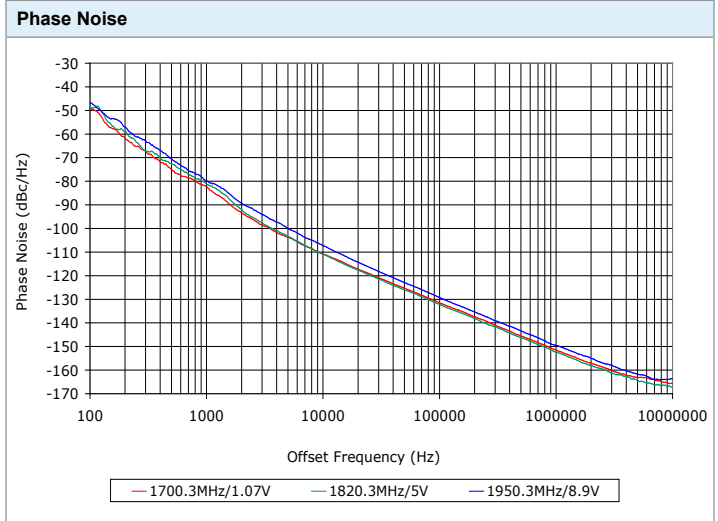
## SURFACE MOUNT MODEL: MFC170195-5

**OPTIMIZED BANDWIDTH**

**1700 - 1950 MHz**

**FEATURES:**

- ▶ Low Phase Noise Performance
- ▶ Fast Tuning
- ▶ Ideal for PLL Applications
- ▶ Small Size, Surface Mount
- ▶ Lead Free Patented REL-PRO® Technology



**SPECIFICATIONS (Rev. C 07/03/07)**

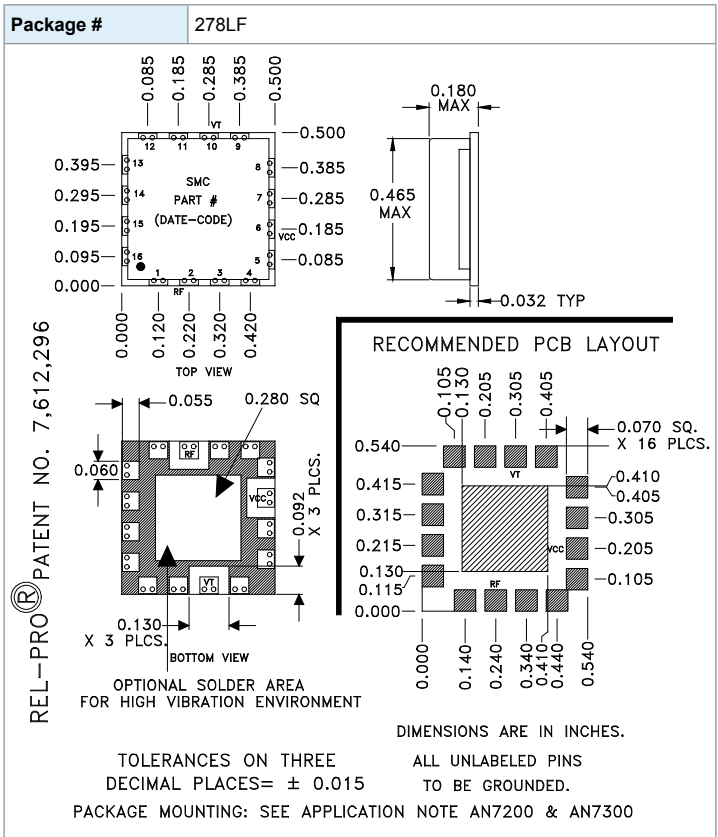
Frequency	1700 - 1950 MHz
Tuning Voltage (Full Band)	See table below.
Bias Voltage	+5 VDC @ 30 mA (Max.)
Output Power	+2 dBm (Min.)
Tuning Sensitivity	25 - 37 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	30 dB (Typ.)
Frequency Pulling	3 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	1 MHz/V (Typ.)
Tuning Port Capacitance	65 pF (Typ.)
Phase Noise @ 10 kHz	-109 dBc/Hz (Typ.)
Operating Temperature Range	-40 to 85 °C

**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	1700 (Max)
5	1800 (Min.)
8	1900 (Min.)
10	1950 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+10 V
DC Voltage Applied to RF Out	± 25 V



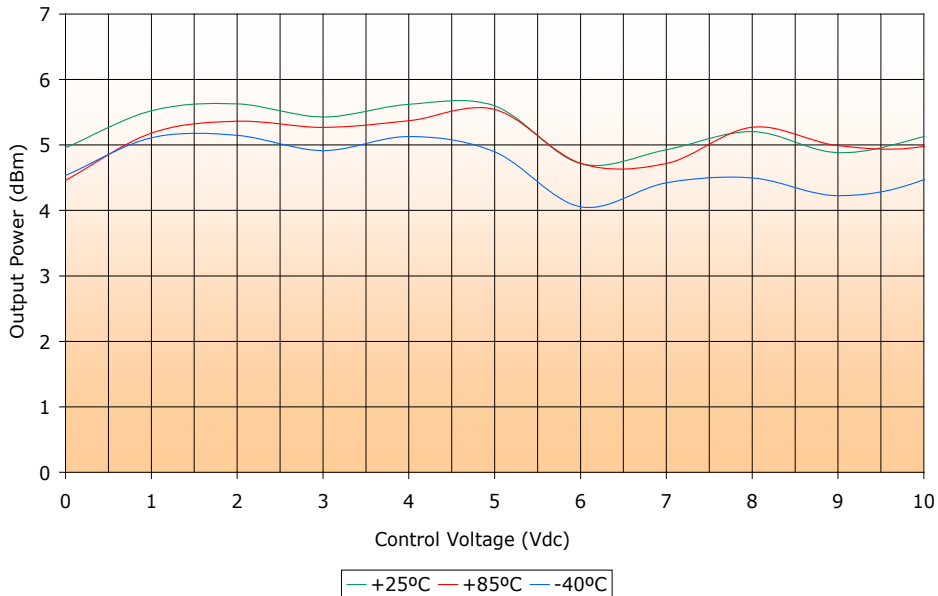
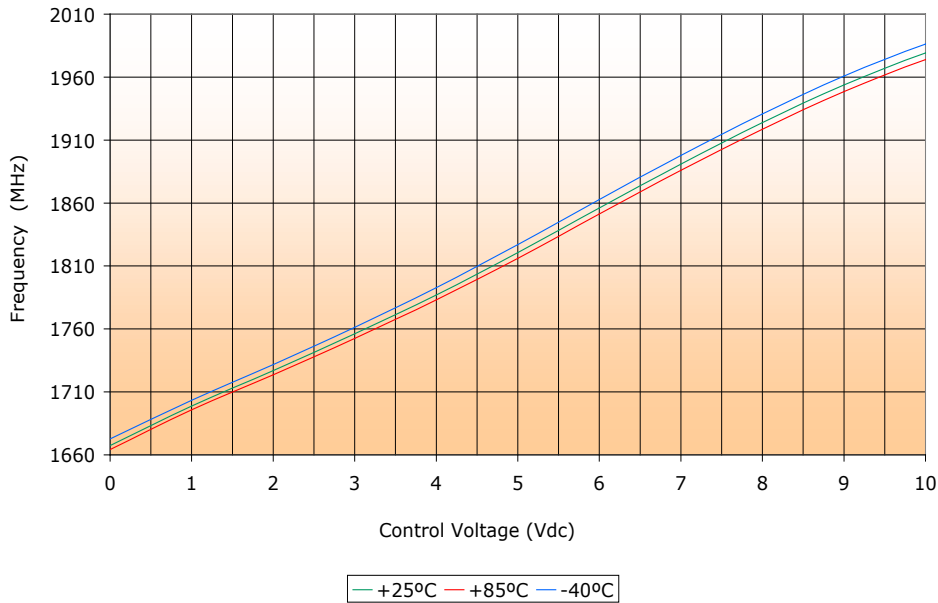
This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623 | 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; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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PERFORMANCE PLOTS



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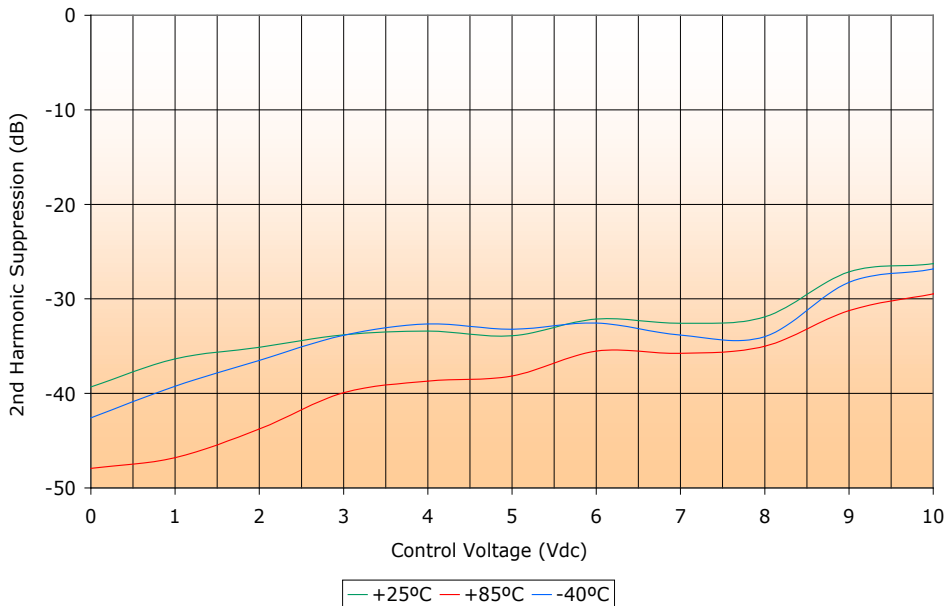
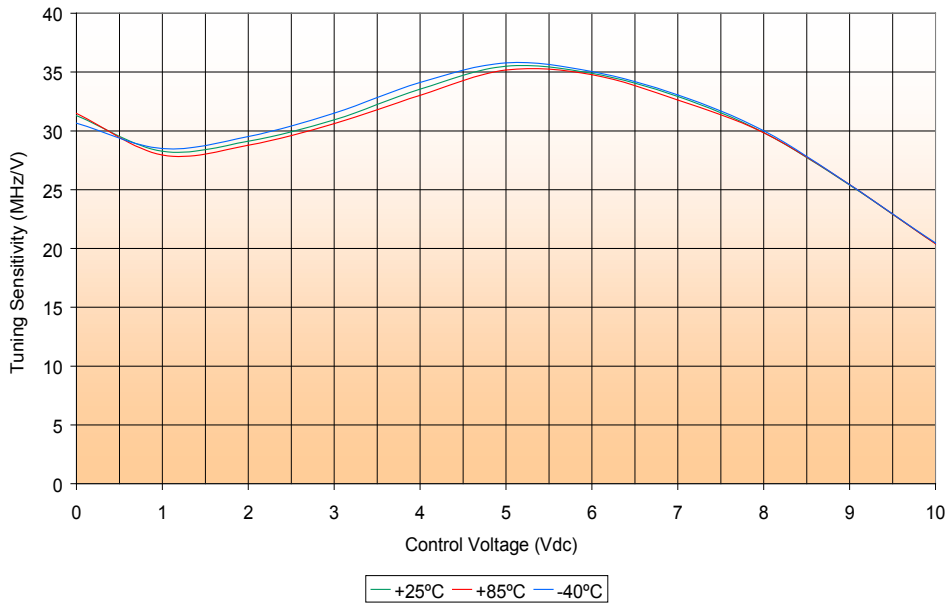
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