

VOLTAGE CONTROLLED OSCILLATOR

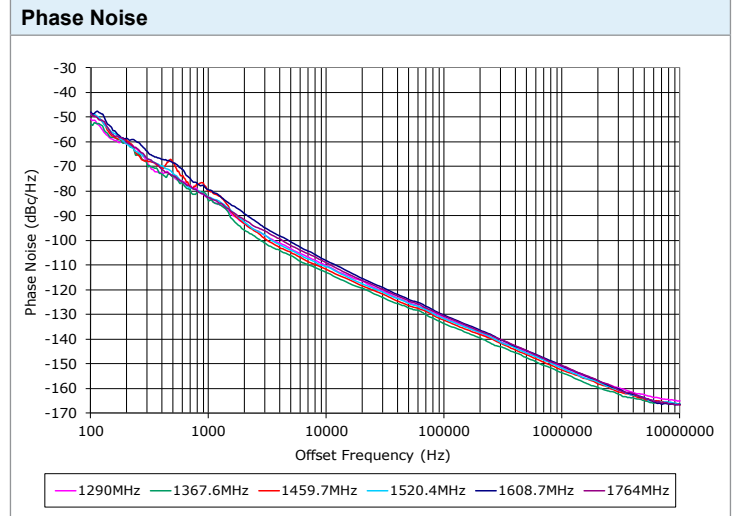
SURFACE MOUNT MODEL: DCRO128177-12

OPTIMIZED BANDWIDTH

1280 - 1775 MHz

FEATURES:

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



SPECIFICATIONS (Rev. D 09/05/12)

Frequency	1280 - 1775 MHz
Tuning Voltage (Full Band)	See table below.
Bias Voltage	+12 VDC @ 40 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	12 - 38 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	15 dB (Typ.)
Frequency Pulling	7 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	5 MHz/V (Typ.)
Tuning Port Capacitance	69 pF (Typ.)
Phase Noise @ 10 kHz	-112 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	1280 (Max)
5	1325 (Min)
8	1400 (Min)
12	1525 (Min)
15	1625 (Min)
18	1700 (Min)
24	1775 (Min)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 V
Tuning Voltage	+26 V
DC Voltage Applied to RF Out	± 25 V

Package # 278LF

The package drawing shows a square package with dimensions: 0.500 (width), 0.500 (height), and 0.085 (thickness). Pin locations are marked with dimensions: 0.085, 0.185, 0.285, 0.385, 0.500, 0.395, 0.295, 0.195, 0.095, 0.000, 0.120, 0.220, 0.320, 0.420, 0.055, 0.280, 0.060, 0.130, 0.092, 0.130, 0.140, 0.240, 0.340, 0.440, 0.540. The recommended PCB layout shows dimensions: 0.180 MAX, 0.465 MAX, 0.032 TYP, 0.105, 0.130, 0.205, 0.305, 0.405, 0.070 SQ. X 16 PLCS., 0.540, 0.415, 0.315, 0.215, 0.130, 0.115, 0.000, 0.140, 0.240, 0.340, 0.440, 0.540. Labels include SMC PART # (DATE-CODE), RF, VCC, and VTT. A note indicates 'OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT'.

REL-PRO® PATENT NO. 7,612,296

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015
 DIMENSIONS ARE IN INCHES.
 ALL UNLABELED PINS TO BE GROUNDING.
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300

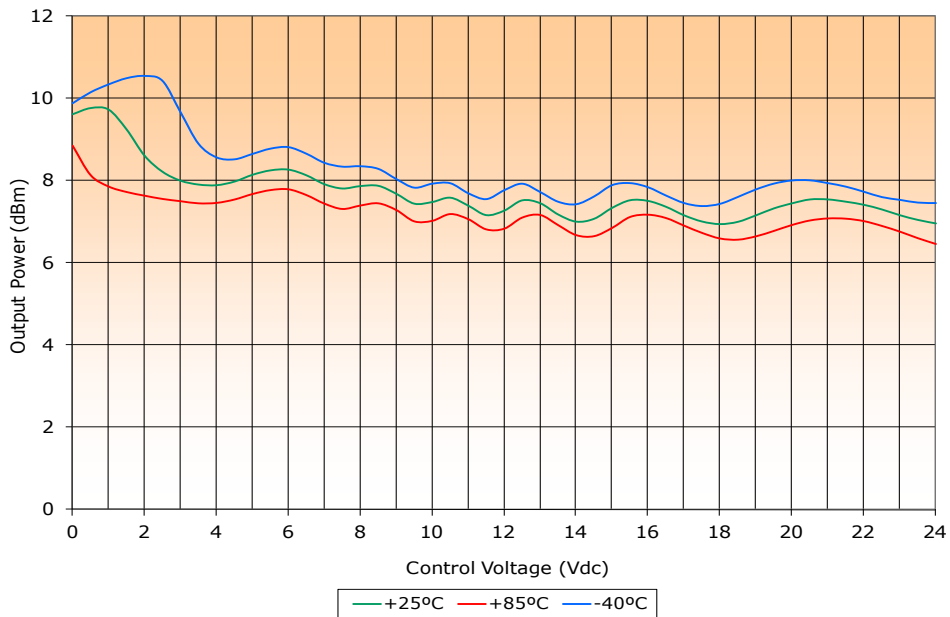
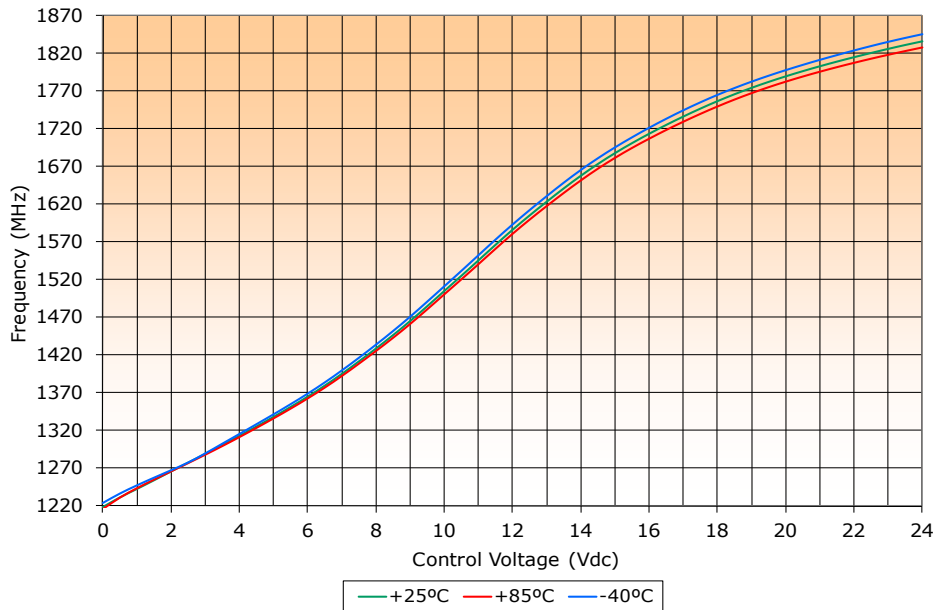
This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693;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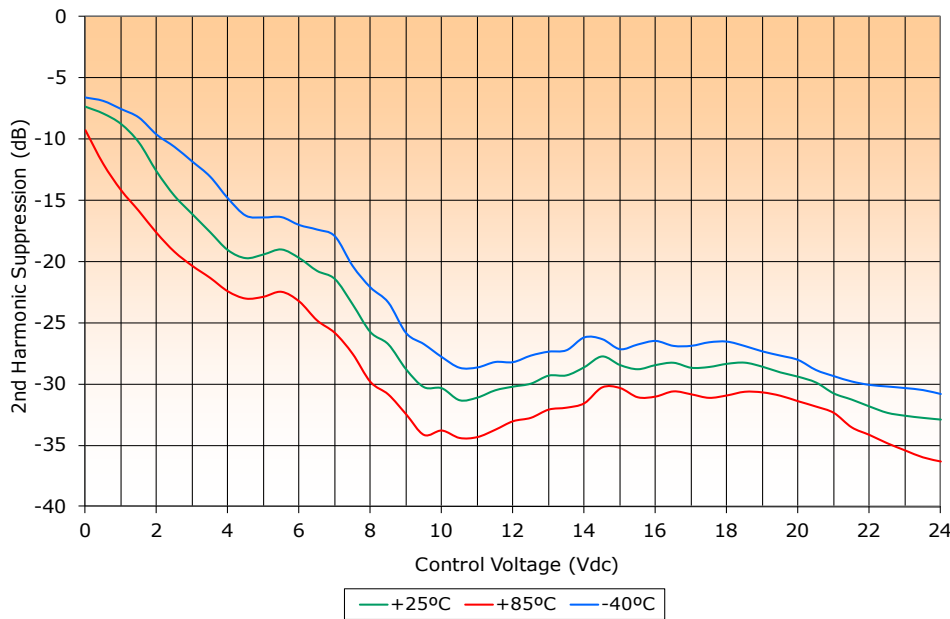
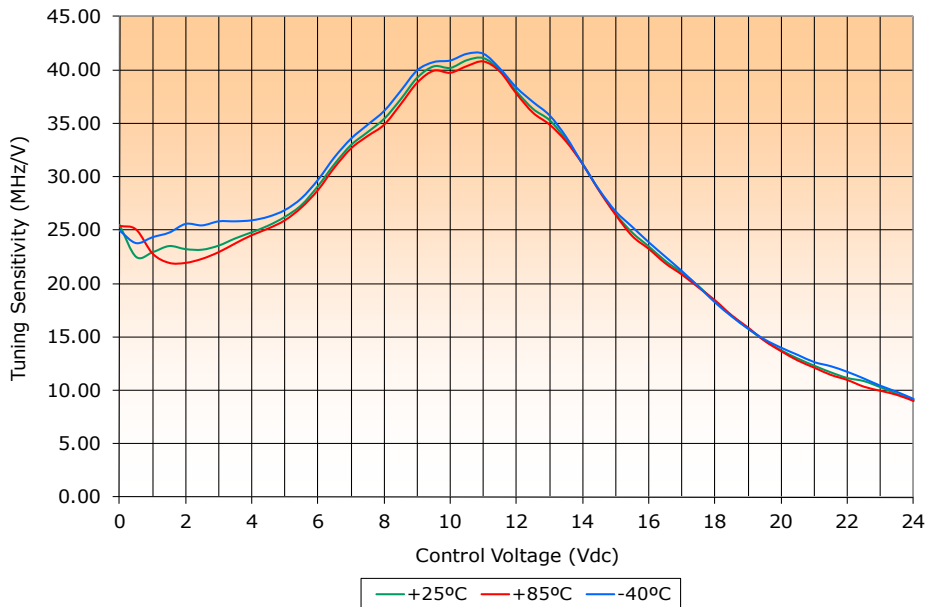


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