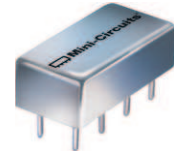


Plug-In Voltage Controlled Oscillator

POS-1060+ POS-1060

Linear Tuning 750 to 1060 MHz



CASE STYLE: A06
PRICE: \$ 14.95 ea QTY (5-49)

Features

- wide tuning range
- 3 dB modulation bandwidth 1 MHz, typ.
- low phase noise
- hermetically sealed

Applications

- cellular up & down converters
- CATV distribution set top converters
- agile communications systems
- test instruments

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

| FREQUENCY (MHz) | | POWER OUTPUT (dBm) | TUNING VOLTAGE (V) | | PHASE NOISE (dBc/Hz) SSB at offset frequencies: Typ. | | | | PULLING pk-pk @ 12 dB (MHz) | PUSHING (MHz/V) | TUNING SENSITIVITY (MHz/V) | HARMONICS (dBc) | | 3 dB MODULATION BANDWIDTH (MHz) | DC OPERATING POWER | |
|-----------------|------|--------------------|--------------------|------|--|--------|---------|-------|-----------------------------|-----------------|----------------------------|-----------------|------|---------------------------------|--------------------|-------------------|
| Min. | Max. | Typ. | Min. | Max. | 1 kHz | 10 kHz | 100 kHz | 1 MHz | Typ. | Typ. | Typ. | Typ. | Max. | Typ. | Vcc (volts) | Current (mA) Max. |
| 750 | 1060 | +12.0 | 1 | 20 | -65 | -90 | -112 | -132 | 50 | 3.0 | 18-32 | -11 | — | 1.0 | 8 | 30 |

Pin Connections

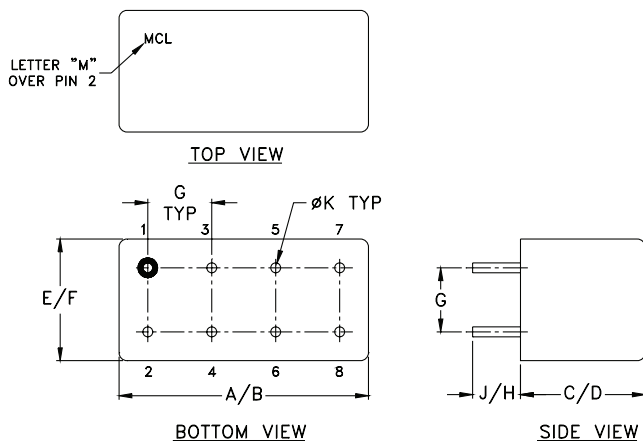
| | |
|-------------|-----------|
| RF OUT | 2 |
| VCC | 1 |
| V-TUNE | 8 |
| GROUND | 3,4,5,6,7 |
| CASE GROUND | 3,4,5,6,7 |

Maximum Ratings

| | |
|--------------------------------------|----------------|
| Operating Temperature | -55°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Absolute Max. Supply Voltage (Vcc) | +10V |
| Absolute Max. Tuning Voltage (Vtune) | +22V |

all specifications: 50 ohm system
Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | J | K | wt |
|--------|-------|-------|-------|-------|-------|------|------|-------|--------|-------|
| .770 | .800 | .285 | .310 | .370 | .400 | .200 | .20 | .14 | .031 | grams |
| 19.558 | 20.32 | 7.239 | 7.874 | 9.398 | 10.16 | 5.08 | 5.08 | 3.556 | 0.7874 | 5.2 |

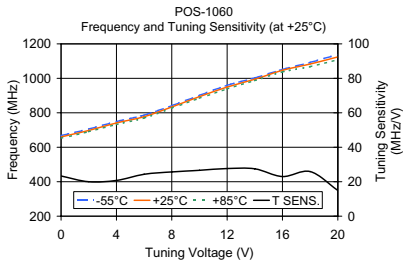
Notes

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- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

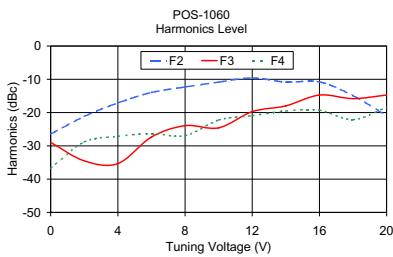
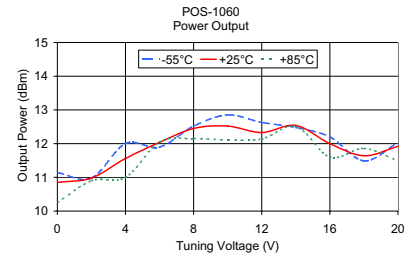


Performance Data & Curves

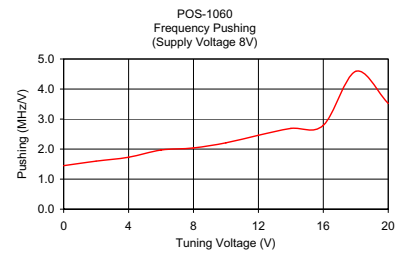
POS-1060+ POS-1060



| V TUNE | TUNING SENS. (MHz/V) | FREQUENCY (MHz) | | | POWER OUTPUT (dBm) | | |
|--------|----------------------|-----------------|---------|---------|--------------------|-------|-------|
| | | -55°C | +25°C | +85°C | -55°C | +25°C | +85°C |
| 0.00 | 23.35 | 667.98 | 660.15 | 652.46 | 11.14 | 10.85 | 10.25 |
| 2.00 | 19.99 | 705.71 | 697.66 | 690.63 | 10.98 | 10.98 | 10.90 |
| 4.00 | 20.73 | 749.19 | 741.35 | 732.14 | 12.00 | 11.56 | 11.00 |
| 6.00 | 24.32 | 786.40 | 777.56 | 770.01 | 11.90 | 12.04 | 12.05 |
| 8.00 | 25.69 | 841.58 | 833.68 | 826.97 | 12.52 | 12.45 | 12.15 |
| 10.00 | 26.61 | 901.15 | 893.70 | 884.16 | 12.85 | 12.52 | 12.11 |
| 12.00 | 27.64 | 959.47 | 949.31 | 938.49 | 12.63 | 12.33 | 12.14 |
| 14.00 | 27.49 | 1002.41 | 994.54 | 986.85 | 12.48 | 12.54 | 12.51 |
| 16.00 | 23.00 | 1052.01 | 1046.38 | 1037.38 | 12.20 | 12.00 | 11.60 |
| 18.00 | 25.88 | 1092.75 | 1083.05 | 1067.83 | 11.49 | 11.64 | 11.86 |
| 20.00 | 14.94 | 1138.66 | 1124.15 | 1108.01 | 12.03 | 11.92 | 11.49 |



| V TUNE | HARMONICS (dBc) | | | FREQ. PUSHING (MHz/V) |
|--------|-----------------|--------|--------|-----------------------|
| | F2 | F3 | F4 | |
| 0.00 | -26.45 | -28.96 | -36.75 | 1.45 |
| 2.00 | -21.14 | -34.52 | -28.82 | 1.60 |
| 4.00 | -17.10 | -35.34 | -27.13 | 1.73 |
| 6.00 | -13.96 | -27.35 | -26.30 | 1.97 |
| 8.00 | -12.30 | -23.93 | -26.93 | 2.04 |
| 10.00 | -10.84 | -24.58 | -22.23 | 2.21 |
| 12.00 | -9.60 | -19.71 | -20.91 | 2.46 |
| 14.00 | -10.84 | -17.99 | -19.54 | 2.69 |
| 16.00 | -10.78 | -14.74 | -19.27 | 2.79 |
| 18.00 | -14.89 | -15.81 | -22.11 | 4.59 |
| 20.00 | -20.96 | -14.73 | -18.43 | 3.52 |



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