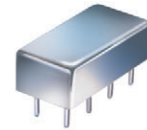


Plug-In Voltage Controlled Oscillator

POS-25+

Wideband 15 to 25 MHz



Features

- output suitable for LO drive to level 7 mixers
- low phase noise
- hermetically sealed

Applications

- test instruments
- signal generators
- agile communications systems

CASE STYLE: A06
PRICE: \$16.95 ea. QTY (5-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify 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. | V _{cc} (volts) | Current (mA) Max. |
| 15 | 25 | +7.0 | 1 | 11 | -86 | -105 | -125 | -145 | 0.06 | 0.04 | 1-4 | -26 | -15 | 0.06 | 12 | 20 |

Pin Connections

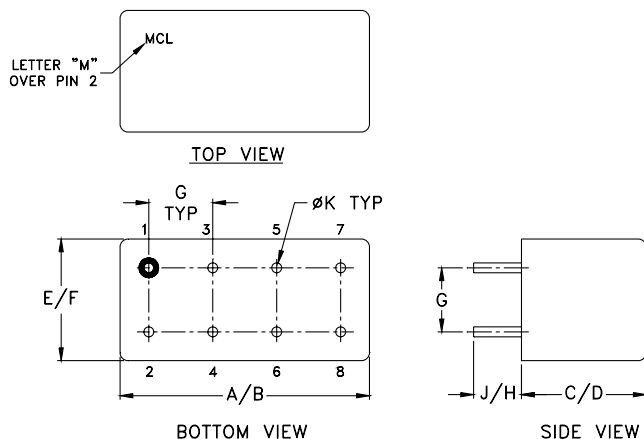
| | |
|-------------|-----------|
| RF OUT | 2 |
| VCC | 1 |
| V-TUNE | 8 |
| GROUND | 3,4,5,6,7 |
| CASE GROUND | 3,4,5,6,7 |

Maximum Ratings

| | |
|---|----------------|
| Operating Temperature | -55°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Absolute Max. Supply Voltage (V _{cc}) | +15V |
| Absolute Max. Tuning Voltage (V _{tune}) | +12V |

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 |

Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 *The Design Engineers Search Engine* Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

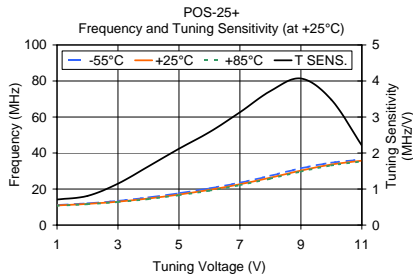
For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

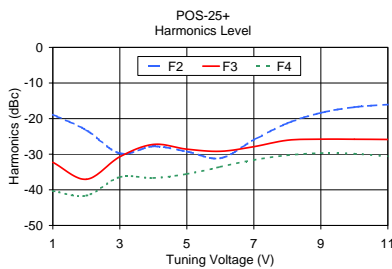
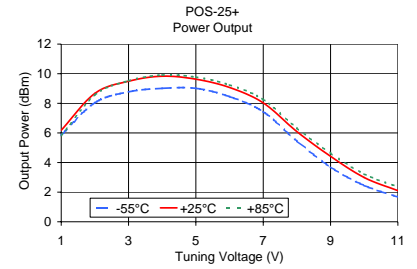
REV. J
M120055
ED-5167
POS-25+
SK/TD/CP/AM
091223

Performance Data & Curves

POS-25+



| V TUNE | TUNING SENS. (MHz/V) | FREQUENCY (MHz) | | | POWER OUTPUT (dBm) | | |
|--------|----------------------|-----------------|-------|-------|--------------------|-------|-------|
| | | -55°C | +25°C | +85°C | -55°C | +25°C | +85°C |
| 1.00 | 0.71 | 11.10 | 10.89 | 10.75 | 5.86 | 6.18 | 5.83 |
| 2.00 | 0.81 | 12.04 | 11.75 | 11.59 | 8.04 | 8.67 | 8.57 |
| 3.00 | 1.15 | 13.42 | 13.01 | 12.78 | 8.77 | 9.49 | 9.52 |
| 4.00 | 1.63 | 15.34 | 14.75 | 14.44 | 9.01 | 9.83 | 9.91 |
| 5.00 | 2.12 | 17.68 | 16.93 | 16.56 | 9.01 | 9.63 | 9.77 |
| 6.00 | 2.58 | 20.36 | 19.55 | 19.10 | 8.45 | 9.07 | 9.24 |
| 7.00 | 3.13 | 23.51 | 22.67 | 22.15 | 7.43 | 8.03 | 8.26 |
| 8.00 | 3.72 | 27.36 | 26.32 | 25.75 | 5.46 | 6.09 | 6.32 |
| 9.00 | 4.07 | 31.53 | 30.25 | 29.67 | 3.69 | 4.42 | 4.64 |
| 10.00 | 3.48 | 34.59 | 33.61 | 33.09 | 2.45 | 2.99 | 3.22 |
| 11.00 | 2.21 | 36.37 | 35.74 | 35.30 | 1.67 | 2.10 | 2.35 |



| V TUNE | HARMONICS (dBc) | | | FREQ. PUSHING (MHz/V) |
|--------|-----------------|--------|--------|-----------------------|
| | F2 | F3 | F4 | |
| 1.00 | -18.88 | -32.27 | -40.34 | 0.00 |
| 2.00 | -23.24 | -37.04 | -41.63 | 0.02 |
| 3.00 | -29.76 | -30.70 | -36.42 | 0.02 |
| 4.00 | -27.81 | -27.25 | -36.68 | 0.00 |
| 5.00 | -29.26 | -28.58 | -35.54 | 0.01 |
| 6.00 | -31.13 | -29.18 | -33.56 | 0.03 |
| 7.00 | -25.97 | -27.89 | -31.63 | 0.00 |
| 8.00 | -21.31 | -26.08 | -30.32 | 0.10 |
| 9.00 | -18.38 | -25.78 | -29.70 | 0.18 |
| 10.00 | -16.78 | -25.79 | -29.88 | 0.06 |
| 11.00 | -16.06 | -25.86 | -30.56 | 0.08 |

