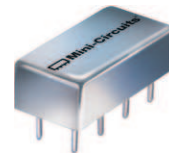


Plug-In

Voltage Controlled Oscillator

POS-900W+

Wideband 500 to 900 MHz



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

Features

- 3 dB modulation bandwidth, 0.1 MHz typ.
- low phase noise
- excellent harmonic suppression, 26 dBc typ.
- hermetically sealed

Applications

- VHF/UHF receivers/transmitters
- agile communication systems
- catv distribution

+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. |
| 500 | 900 | +7.0 | 1 | 20 | -75 | -95 | -115 | -135 | 2.0 | 0.3 | 16-40 | -26 | -20 | 0.1 | 12 | 25 |

Pin Connections

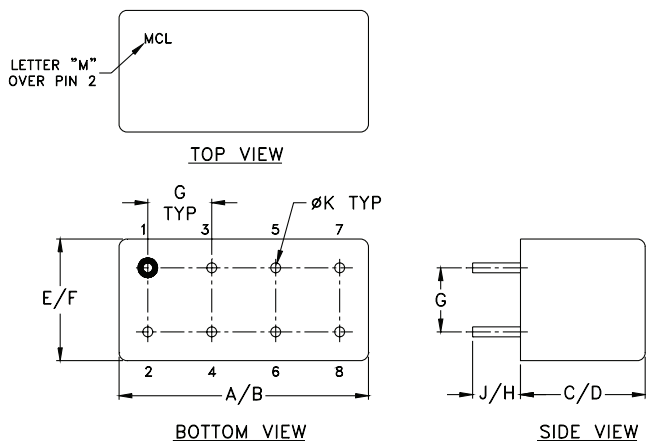
| | |
|-------------|-----------|
| RF OUT | 2 |
| VCC | 1 |
| V-TUNE | 8 |
| GROUND | 3,4,5,6,7 |
| CASE GROUND | 3,4,5,6,7 |

Maximum Ratings

| | |
|--------------------------------------|----------------|
| Operating Temperature | -55°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Absolute Max. Supply Voltage (Vcc) | +15V |
| Absolute Max. Tuning Voltage (Vtune) | +25V |

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 |

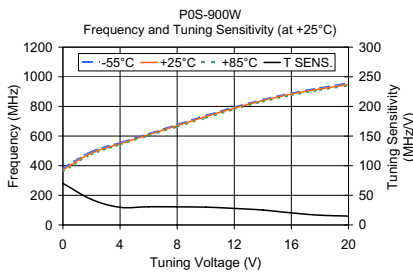
Notes

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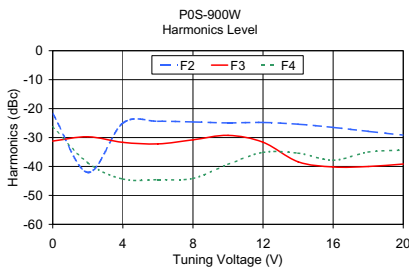
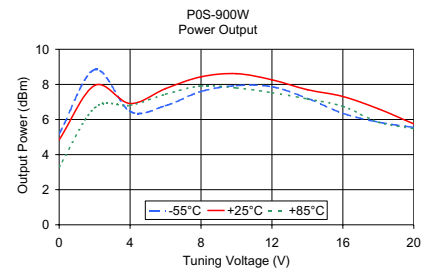


Performance Data & Curves

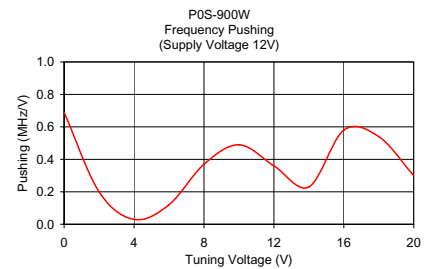
POS-900W+



| 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 | 70.29 | 383.72 | 372.25 | 360.35 | 5.18 | 4.84 | 3.29 |
| 2.00 | 43.09 | 494.94 | 485.63 | 475.93 | 8.84 | 7.94 | 6.67 |
| 4.00 | 29.77 | 555.22 | 547.86 | 541.43 | 6.46 | 6.91 | 6.81 |
| 6.00 | 30.79 | 615.16 | 609.39 | 602.55 | 6.79 | 7.76 | 7.44 |
| 8.00 | 30.60 | 677.59 | 670.62 | 662.14 | 7.60 | 8.43 | 7.91 |
| 10.00 | 29.94 | 738.59 | 731.23 | 722.04 | 7.93 | 8.61 | 7.80 |
| 12.00 | 27.86 | 794.88 | 788.12 | 779.69 | 7.87 | 8.26 | 7.53 |
| 14.00 | 25.17 | 845.79 | 839.79 | 832.28 | 7.21 | 7.70 | 7.17 |
| 16.00 | 20.36 | 889.66 | 883.31 | 874.86 | 6.35 | 7.31 | 6.75 |
| 18.00 | 16.44 | 925.14 | 917.62 | 909.65 | 5.85 | 6.61 | 5.85 |
| 20.00 | 14.94 | 958.19 | 948.15 | 940.37 | 5.55 | 5.75 | 5.48 |



| V TUNE | HARMONICS (dBc) | | | FREQ. PUSHING (MHz/V) |
|--------|-----------------|--------|--------|-----------------------|
| | F2 | F3 | F4 | |
| 0.00 | -21.72 | -31.22 | -26.39 | 0.69 |
| 2.00 | -42.06 | -29.73 | -38.73 | 0.20 |
| 4.00 | -25.01 | -31.68 | -44.34 | 0.03 |
| 6.00 | -24.37 | -32.20 | -44.53 | 0.12 |
| 8.00 | -24.61 | -30.78 | -44.11 | 0.37 |
| 10.00 | -24.93 | -29.26 | -39.26 | 0.49 |
| 12.00 | -24.78 | -31.62 | -35.12 | 0.36 |
| 14.00 | -25.39 | -38.39 | -35.39 | 0.23 |
| 16.00 | -26.49 | -40.16 | -37.82 | 0.58 |
| 18.00 | -27.85 | -40.01 | -35.01 | 0.54 |
| 20.00 | -29.15 | -39.15 | -34.32 | 0.30 |



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