

Plug-In

Voltage Controlled Oscillator

POS-200P

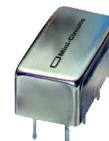
5V Tuning for PLL IC's 95 to 120 MHz

Features

- 5V tuning voltage range
- low phase noise
- hermetically sealed

Applications

- PLL circuitry
- instrumentation



CASE STYLE: A06
PRICE: \$12.95 ea. QTY (5-49)

Electrical Specifications

| MODEL NO. | FREQ. (MHz) | | POWER OUTPUT (dBm) | 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. | | 1 kHz | 10 kHz | 100 kHz | 1 MHz | | | | Typ. | Max. | | Voltage (V) | Current (mA) |
| POS-200P | 95 | 120 | 10 | -77 | -102 | -123 | -146 | 1.0 | 0.2 | 7 - 10 | -30 | -20 | 0.1 | 12 | 20 |

TUNING VOLTAGE TO COVER FREQUENCY RANGE 0.5V TO 5V

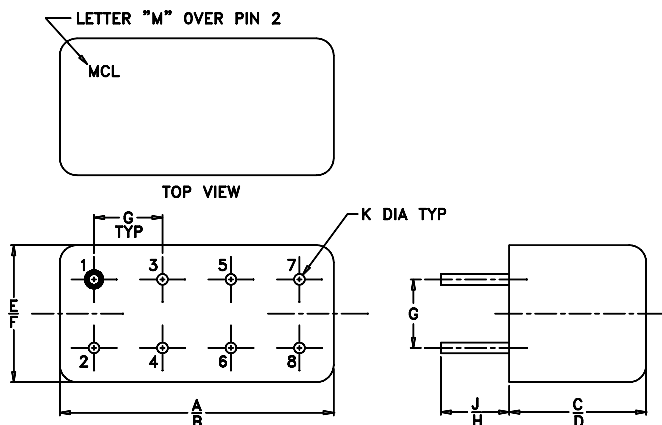
Pin Connections

| | |
|-------------|-----------|
| RFOUT | 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) | +16V |
| Absolute Max. Tuning Voltage (Vtune) | +7V |
| all specifications: 50 ohm system | |

Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1.
PIN NUMBERS DO NOT APPEAR ON UNIT,
FOR REFERENCE ONLY.

Outline Dimensions (inch)

| A | B | C | D | E | F | G | H | J | K | wt. |
|-------|-------|------|------|------|-------|------|------|------|------|-------|
| .770 | .800 | .285 | .310 | .370 | .400 | .200 | .20 | .14 | .031 | grams |
| 19.56 | 20.32 | 7.24 | 7.87 | 9.40 | 10.16 | 5.08 | 5.08 | 3.56 | .79 | 5.2 |

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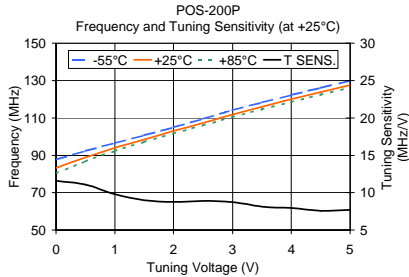
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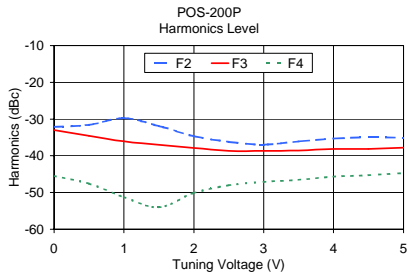
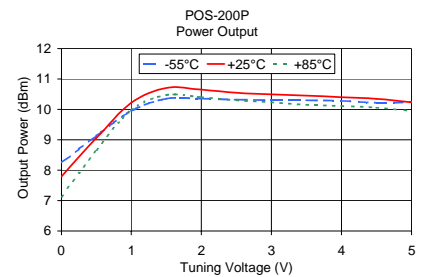
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| V TUNE | TUNING SENS. (MHz/V) | FREQUENCY (MHz) | | | POWER OUTPUT (dBm) | | |
|-----------|----------------------------|-----------------|--------|--------|--------------------|-------|-------|
| | | -55°C | +25°C | +85°C | -55°C | +25°C | +85°C |
| 0.0 | 11.60 | 87.77 | 83.24 | 80.40 | 8.25 | 7.79 | 7.13 |
| 0.5 | 11.10 | 92.32 | 88.92 | 86.83 | 9.13 | 9.06 | 8.66 |
| 1.0 | 9.79 | 96.60 | 93.96 | 92.34 | 9.95 | 10.22 | 9.98 |
| 1.5 | 8.99 | 100.73 | 98.54 | 97.18 | 10.35 | 10.71 | 10.47 |
| 2.0 | 8.77 | 104.99 | 103.01 | 101.73 | 10.35 | 10.65 | 10.40 |
| 2.5 | 8.89 | 109.57 | 107.36 | 106.12 | 10.32 | 10.55 | 10.30 |
| 3.0 | 8.75 | 114.11 | 111.84 | 110.50 | 10.30 | 10.49 | 10.23 |
| 3.5 | 8.14 | 118.25 | 115.96 | 114.62 | 10.30 | 10.46 | 10.15 |
| 4.0 | 7.95 | 122.24 | 119.97 | 118.56 | 10.28 | 10.40 | 10.11 |
| 4.5 | 7.60 | 126.11 | 123.82 | 122.40 | 10.22 | 10.35 | 10.06 |
| 5.0 | 7.72 | 129.94 | 127.66 | 126.28 | 10.23 | 10.23 | 9.95 |



| V TUNE | HARMONICS (dBc) | | | FREQ. PUSHING (MHz/V) |
|-----------|-----------------|--------|--------|--------------------------|
| | F2 | F3 | F4 | |
| 0.0 | -32.16 | -33.00 | -45.50 | 0.00 |
| 0.5 | -31.60 | -34.60 | -47.60 | 0.00 |
| 1.0 | -29.76 | -36.09 | -51.26 | 0.38 |
| 1.5 | -31.90 | -37.06 | -54.06 | 0.38 |
| 2.0 | -34.67 | -37.84 | -50.17 | 0.26 |
| 2.5 | -36.20 | -38.70 | -48.03 | 0.26 |
| 3.0 | -36.97 | -38.64 | -47.14 | 0.19 |
| 3.5 | -36.08 | -38.58 | -46.58 | 0.19 |
| 4.0 | -35.35 | -38.18 | -45.68 | 0.19 |
| 4.5 | -34.97 | -38.13 | -45.30 | 0.06 |
| 5.0 | -35.08 | -37.75 | -44.75 | 0.13 |

