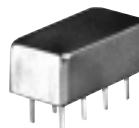


VOLTAGE CONTROLLED OSCILLATORS

Plug-In

LINEAR TUNING 15 to 2000 MHz



POS

| MODEL NO. | FREQ. (MHz) | | POWER OUTPUT (dBm) | TUNE VOLTAGE (V) | | PHASE NOISE (dBc/Hz) SSB@ offset frequencies: Typ. | | | | PULLING (MHz) pk-pk @12 dB | PUSHING (MHz/V) | TUNING SENSITIVITY (MHz/V) | HARMONICS (dBc) | | 3 dB MOD. BANDWIDTH (kHz) | POWER SUPPLY | | CASE STYLE | C ONNECTION | PRICE \$ |
|-----------|-------------|------|--------------------|------------------|------|--|--------|---------|-------|----------------------------|-----------------|----------------------------|-----------------|------|---------------------------|------------------|-------------------|------------|-------------|----------|
| | Min. | Max. | | Min. | Max. | 1 kHz | 10 kHz | 100 kHz | 1 MHz | | | | Typ. | Max. | | Voltage (V) Nom. | Current (mA) Max. | | | |
| POS-25 | 15-25 | | +7.0 | 1 | 11 | -86 | -105 | -125 | -145 | 0.06 | 0.04 | 1-4 | -26 | -15 | 60 | 12 | 20 | A06 | hx | 16.95 |
| POS-50 | 25-50 | | +8.5 | 1 | 16 | -88 | -110 | -130 | -150 | 0.06 | 0.04 | 2.0-2.6 | -19 | -12 | 100 | 12 | 20 | A06 | hx | 11.95 |
| POS-75 | 37.5-75 | | +8.0 | 1 | 16 | -87 | -110 | -130 | -150 | 0.15 | 0.11 | 3.1-3.8 | -27 | -16 | 100 | 12 | 20 | A06 | hx | 11.95 |
| POS-100 | 50-100 | | +8.3 | 1 | 16 | -83 | -107 | -130 | -150 | 0.6 | 0.2 | 4.2-4.8 | -23 | -18 | 100 | 12 | 20 | A06 | hx | 11.95 |
| POS-150 | 75-150 | | +9.5 | 1 | 16 | -80 | -103 | -127 | -147 | 0.8 | 0.3 | 5.8-6.7 | -23 | -17 | 100 | 12 | 20 | A06 | hx | 11.95 |
| POS-200 | 100-200 | | +10.0 | 1 | 16 | -80 | -102 | -122 | -142 | 1.0 | 0.2 | 7.1-8.6 | -24 | -20 | 100 | 12 | 20 | A06 | hx | 11.95 |
| POS-300 | 150-280 | | +10.0 | 1 | 16 | -78 | -100 | -120 | -140 | 1.8 | 0.3 | 9.5-13 | -30 | -20 | 100 | 12 | 20 | A06 | hx | 13.95 |
| POS-400 | 200-380 | | +9.5 | 1 | 16 | -76 | -98 | -120 | -140 | 1.8 | 0.3 | 13.7-16.9 | -28 | -20 | 100 | 12 | 20 | A06 | hx | 13.95 |
| POS-535 | 300-525 | | +8.8 | 1 | 16 | -70 | -93 | -116 | -139 | 2.0 | 0.4 | 10.5-24 | -26 | -20 | 100 | 12 | 20 | A06 | hx | 13.95 |
| POS-765 | 485-765 | | +9.5 | 1 | 16 | -61 | -85 | -108 | -129 | 5.0 | 0.4 | 18-27 | -21 | -17 | 100 | 12 | 22 | A06 | hx | 14.95 |
| POS-1025 | 685-1025 | | +9.0 | 1 | 16 | -65 | -84 | -104 | -124 | 5.0 | 0.6 | 21-36 | -23 | -18 | 100 | 12 | 22 | A06 | hx | 16.95 |
| POS-1060 | 750-1060 | | +12.0 | 1 | 20 | -65 | -90 | -112 | -132 | 50 | 3.0 | 18-32 | -11 | — | 1000 | 8 | 30 | A06 | hx | 14.95 |

NOTES:

- General Quality Control Procedures, Environmental specifications, Hi-Rel, and MIL description are given in General Information (Section 0).
- Connector types and case mounted options, case finishes are given in section 0, see "Case Styles & Outline Drawings".
- Prices and Specifications subject to change without notice.
 - Operating Temperature: -55°C to +85°C
 - Absolute Maximum Supply Voltage (V_{CC}) & Tuning Voltage (V_{tune}):

| Model | (V_{CC}) | (V_{tune}) | Model | (V_{CC}) | (V_{tune}) |
|----------|--------------|----------------|-----------|--------------|----------------|
| POS-25 | +15V | +12V | POS-765 | +16V | +18V |
| POS-50 | +16V | +17V | POS-800W | +12V | +20V |
| POS-75 | +16V | +18V | POS-900W | +15V | +25V |
| POS-100 | +16V | +18V | POS-1000W | +15V | +20V |
| POS-150 | +16V | +18V | POS-1025 | +16V | +18V |
| POS-200 | +16V | +18V | POS-1060 | +10V | +22V |
| POS-300 | +16V | +18V | POS-1400A | +10V | +25V |
| POS-400 | +16V | +18V | POS-2000A | +10V | +25V |
| POS-500W | +15V | +20V | POS-2120W | +15V | +25V |
| POS-535 | +16V | +18V | | | |

designers kits available

| KIT No. | No. of Units in KIT | Description | Price \$ per KIT |
|---------|---------------------|--|------------------|
| K-POS1 | 10 | 1 of each: POS-50, 75, 100, 150, 200, 300, 400, 535, 765, 1025 | 124.95 |
| K-POS2 | 7 | 1 of each: POS-50, 100, 200, 400, 535, 765, 1025 | 79.95 |
| K-POS3 | 6 | 2 of each: POS-1060, 1400A, 2000A | 79.95 |

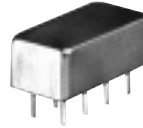


Distribution Centers NORTH AMERICA 800-654-7949 • 417 335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

INTERNET <http://www.minicircuits.com>

ISO 9001 CERTIFIED

WIDE BAND 250 to 2120 MHz



POS

| MODEL NO. | FREQ. (MHz) | | POWER OUTPUT (dBm) | TUNE VOLTAGE (V) | | PHASE NOISE (dBc/Hz) SSB@ offset frequencies: Typ. | | | | PULLING (MHz) pk-pk @12 dB | PUSHING (MHz/V) | TUNING SENSITIVITY (MHz/V) | HARMONICS (dBc) | | 3 dB MOD. BANDWIDTH (kHz) | POWER SUPPLY | | CASE STYLE | C CONNECTION | PRICE \$ |
|---------------|-------------|------|--------------------|------------------|------|--|--------|---------|-------|----------------------------|-----------------|----------------------------|-----------------|------|---------------------------|------------------|-------------------|------------|--------------|----------|
| | Min. | Max. | | Min. | Max. | 1 kHz | 10 kHz | 100 kHz | 1 MHz | | | | Typ. | Max. | | Voltage (V) Nom. | Current (mA) Max. | | | |
| POS-500W | 250 | 500 | +10.0 | 1 | 16 | -79 | -100 | -120 | -140 | 1.5 | 0.2 | 17-23 | -25 | -18 | 100 | 12 | 25 | A06 | hx | 18.95 |
| POS-800W | 400 | 800 | +8.0 | 0.5 | 18 | -71 | -93 | -115 | -137 | 3.0 | 0.5 | 18-50 | -26 | -18 | 100 | 10 | 25 | A06 | hx | 16.95 |
| POS-900W | 500 | 900 | +7.0 | 1 | 20 | -75 | -95 | -115 | -135 | 2.0 | 0.3 | 16-40 | -26 | -20 | 100 | 12 | 25 | A06 | hx | 16.95 |
| POS-1000W | 500 | 1000 | +7.0 | 1 | 16 | -73 | -93 | -113 | -133 | 6.0 | 1.5 | 30-42 | -26 | -20 | 100 | 12 | 20 | A06 | hx | 19.95 |
| NEW POS-1400A | 975 | 1400 | +13.0 | 1 | 20 | -65 | -95 | -115 | -135 | 14 | 2.0 | 25-30 | -16 | — | 4000 | 8 | 30 | A06 | hx | 14.95 |
| NEW POS-2000A | 1370 | 2000 | +11.8 | 1 | 20 | -73 | -97 | -117 | -137 | 12 | 3.0 | 30-45 | -24 | -12 | 4000 | 8 | 30 | A06 | hx | 14.95 |
| POS-2120W | 1060 | 2120 | +8.0 | 0.5 | 20 | -70 | -97 | -117 | -137 | 27.0 | 2.5 | 35-120 | -11 | — | 1000 | 12 | 28 | A06 | hx | 21.95 |

features

- Octave bandwidth range (typ.)
- Linear tuning
- Low phase noise
- Excellent harmonic suppression
- Output suitable for LO drive to mixers
- Low power consumption, typically 190 mW (most models)
- 12-V parts are usable with +15V supply for higher power output, typically 2 dB

applications

- digital cordless phones
- cellular up-and-down converters
- catv distribution set top converters
- wideband frequency synthesizers
- test instruments
- signal generators
- agile communications systems

pin connections

see case style outline drawings

| PORT | hx |
|---------|-----------|
| RF OUT | 2 |
| V-CC | 1 |
| V-TUNE | 8 |
| GND EXT | 3,4,5,6,7 |



The Design Engineers Search Engine

Provides Actual Data Instantly
At: <http://www.minicircuits.com>

In Stock... Immediate Delivery

For Custom Versions Of Standard Models
Consult Our Applications Dept.

