

Plug-In

# Voltage Controlled Oscillator

# POS-100

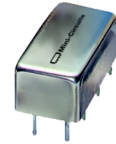
## Linear Tuning 50 to 100 MHz

### Features

- excellent harmonic suppression, -23 dBc typ.
- 3 dB modulation bandwidth, 0.1 MHz typ.
- hermetically sealed

### Applications

- test instruments
- agile communications systems



CASE STYLE:A06  
 PRICE: \$11.95 ea. QTY (5-49)

### Electrical Specifications

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	TUNING VOLTAGE (V)		PHASE NOISE dBc/Hz SSB at offset frequencies: Typ.				PULLING pk-pk @ 12 dBr (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.
POS-100	50	100	+8.3	1	16	-83	-107	-130	-150	.06	0.2	4.2-4.8	-23	-18	0.1	12	20

### Pin Connections

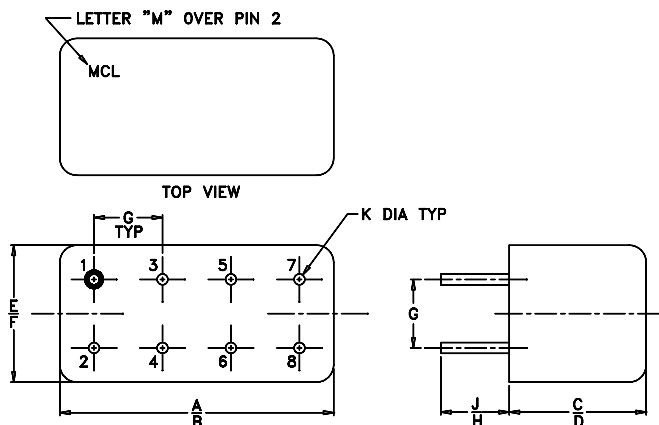
PORT	hx
RF OUT	2
VCC	1
V-TUNE	8
GND EXT.	3,4,5,6,7

### 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)	+18V

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/mm)

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

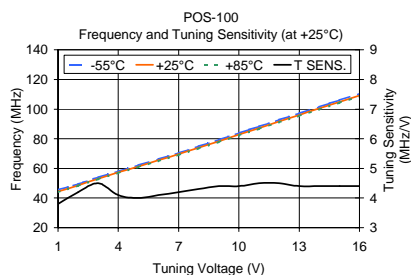


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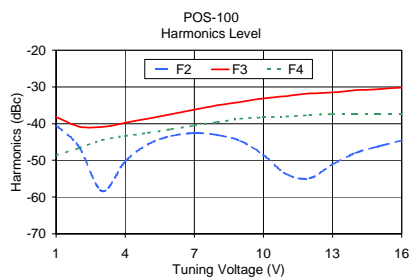
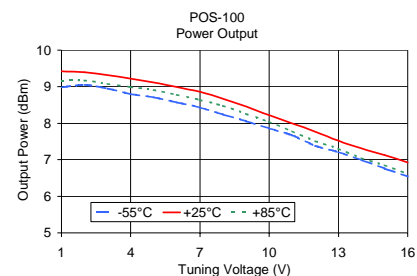
Mini-Circuits ISO 9001 & ISO 14001 Certified

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

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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
1.0	3.8	45.5	44.4	43.9	8.9	9.4	9.1
2.0	4.2	49.4	48.6	48.3	9.0	9.4	9.1
3.0	4.5	53.9	53.1	52.8	8.9	9.3	9.0
4.0	4.1	58.0	57.2	56.9	8.8	9.2	8.9
5.0	4.0	62.1	61.3	60.8	8.7	9.1	8.9
6.0	4.1	66.2	65.4	64.9	8.5	8.9	8.7
7.0	4.2	70.4	69.6	69.1	8.4	8.8	8.6
8.0	4.3	74.8	73.9	73.4	8.2	8.6	8.4
9.0	4.4	79.2	78.3	77.8	8.0	8.4	8.2
10.0	4.4	83.7	82.7	82.2	7.8	8.2	8.0
11.0	4.5	88.2	87.2	86.6	7.6	8.0	7.7
12.0	4.5	92.7	91.6	91.1	7.3	7.7	7.5
13.0	4.4	97.1	96.0	95.4	7.2	7.5	7.3
14.0	4.4	101.5	100.4	99.8	6.9	7.3	7.0
15.0	4.4	105.9	104.8	104.1	6.7	7.1	6.8
16.0	4.4	110.4	109.2	108.5	6.5	6.9	6.6



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.0	-40.4	-38.2	-48.7	0.02
2.0	-46.4	-40.8	-46.6	0.28
3.0	-58.4	-40.9	-44.5	0.22
4.0	-50.3	-39.8	-43.4	0.15
5.0	-45.6	-38.6	-42.5	0.13
6.0	-43.4	-37.4	-41.5	0.12
7.0	-42.6	-36.2	-40.5	0.15
8.0	-43.1	-35.0	-39.6	0.18
9.0	-44.7	-34.1	-38.7	0.22
10.0	-48.5	-33.1	-38.3	0.23
11.0	-53.8	-32.5	-38.1	0.25
12.0	-54.9	-31.8	-37.7	0.24
13.0	-51.1	-31.5	-37.4	0.23
14.0	-48.0	-30.9	-37.3	0.28
15.0	-46.2	-30.6	-37.3	0.32
16.0	-44.6	-30.2	-37.3	0.40

