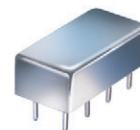


# Plug-In Voltage Controlled Oscillator

## POS-900W+ POS-900W

Wideband 500 to 900 MHz



### 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

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

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

*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.	V <sub>cc</sub> (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

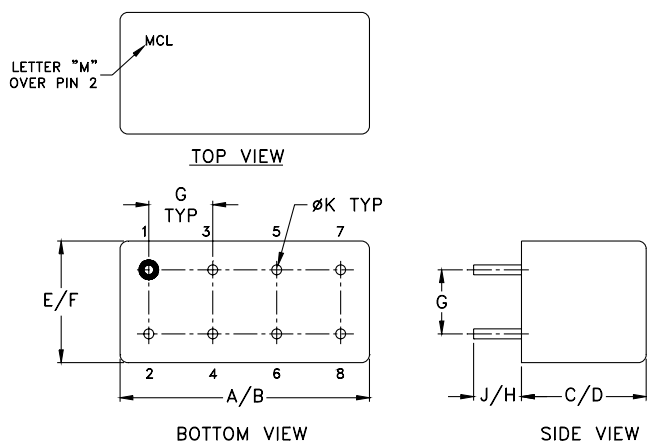
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (V <sub>cc</sub> )	+15V
Absolute Max. Tuning Voltage (V <sub>tune</sub> )	+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

**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](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

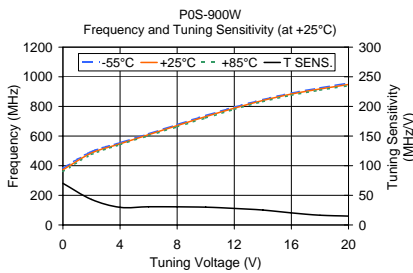
For detailed performance specs  
& shopping online see web site

**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](http://www.minicircuits.com/MCLStore/terms.jsp).

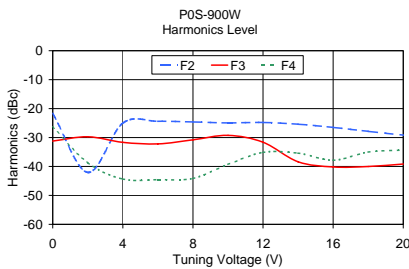
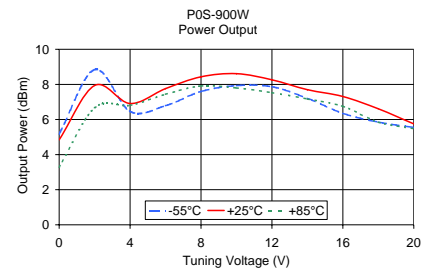
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# Performance Data & Curves

# POS-900W+ 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

