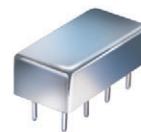


# Plug-In Voltage Controlled Oscillator

## POS-800W+ POS-800W

Wideband 400 to 800 MHz



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.*

### Features

- octave frequency range
- low pulling, 3 MHz typ.
- flat power output
- low phase noise, -137 typ. dBc at 1 MHz offset, typ.
- hermetically sealed

### Applications

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

### 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.
400	800	+8.0	0.5	18	-71	-93	-115	-137	3.0	0.5	18-50	-26	-18	0.1	10	25

### Pin Connections

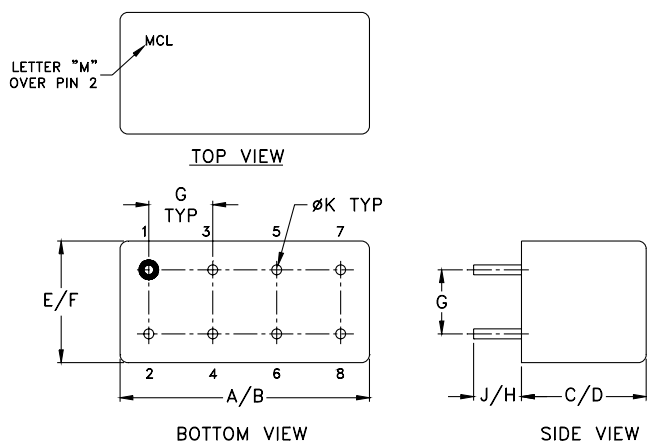
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+12V
Absolute Max. Tuning Voltage (Vtune)	+20V

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

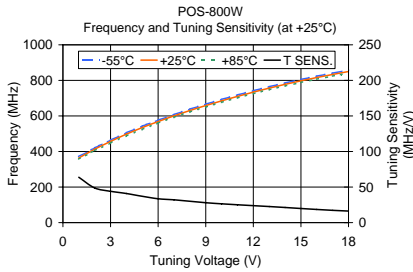
For detailed performance specs  
& shopping online see web site

**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).

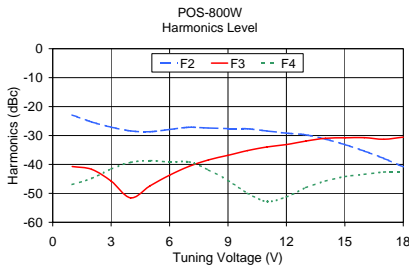
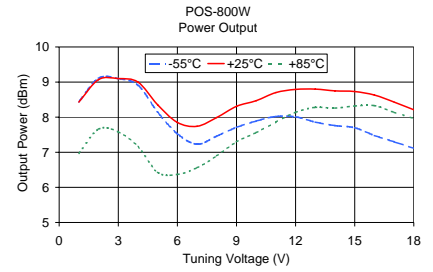
REV. B  
M98898  
ED-6171A/2  
POS-800W  
FL/TD/CP/AM  
091223  
Page 1 of 2

# Performance Data & Curves

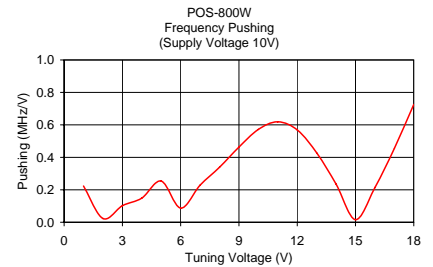
# POS-800W+ POS-800W



V TUNE	TUNING SENS. (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)		
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C
1.00	63.79	371.48	363.89	357.49	8.44	8.43	6.97
2.00	48.79	420.02	412.69	405.46	9.11	9.07	7.66
3.00	44.06	464.34	456.75	448.26	9.10	9.10	7.58
4.00	40.96	505.55	497.70	487.56	8.91	9.00	7.16
5.00	37.01	542.79	534.71	524.35	8.14	8.35	6.43
6.00	33.58	576.21	568.29	560.14	7.53	7.85	6.37
7.00	32.11	608.00	600.40	592.67	7.23	7.74	6.56
8.00	30.00	638.18	630.39	622.48	7.46	7.99	6.90
9.00	27.97	666.38	658.36	650.29	7.71	8.31	7.30
10.00	26.46	692.97	684.82	676.62	7.89	8.47	7.56
11.00	25.11	718.14	709.92	701.57	8.02	8.70	7.86
12.00	23.87	741.94	733.79	725.24	8.01	8.79	8.14
13.00	22.63	764.43	756.42	747.62	7.86	8.80	8.28
14.00	21.29	785.53	777.71	768.76	7.76	8.75	8.26
15.00	19.88	805.28	797.59	788.59	7.70	8.73	8.32
16.00	18.53	823.70	816.12	807.11	7.48	8.63	8.33
17.00	17.30	840.93	833.41	824.36	7.30	8.43	8.14
18.00	16.29	857.16	849.70	840.45	7.11	8.21	7.96



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.00	-22.89	-40.71	-46.94	0.22
2.00	-25.32	-41.70	-44.79	0.02
3.00	-27.10	-45.75	-41.60	0.10
4.00	-28.41	-51.55	-39.30	0.15
5.00	-28.67	-47.37	-38.66	0.25
6.00	-27.89	-43.72	-39.19	0.09
7.00	-27.14	-40.66	-39.12	0.23
8.00	-27.39	-38.44	-41.90	0.34
9.00	-27.60	-36.84	-45.51	0.46
10.00	-27.68	-35.21	-49.95	0.57
11.00	-28.43	-33.95	-52.78	0.62
12.00	-29.19	-33.12	-51.22	0.57
13.00	-29.76	-31.93	-48.02	0.43
14.00	-31.25	-30.97	-45.76	0.24
15.00	-33.14	-30.79	-44.19	0.02
16.00	-35.37	-30.75	-43.40	0.21
17.00	-37.90	-31.29	-42.64	0.46
18.00	-40.81	-30.57	-42.55	0.73



For detailed performance specs & shopping online see web site

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