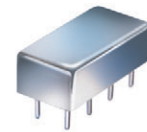


Plug-In Voltage Controlled Oscillator

POS-100+

Linear Tuning 50 to 100 MHz



CASE STYLE: A06

Features

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

Applications

- test instruments
- agile communications systems

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

The +Suffix has been added in order to identify 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.	Vcc (volts)	Current (mA) Max.
50	100	+8.3	1	16	-83	-107	-130	-150	0.6	0.2	4.2-4.8	-23	-18	0.1	12	20

Pin Connections

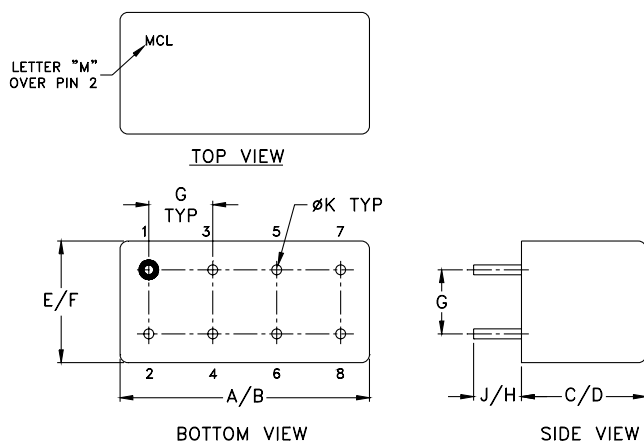
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+16V
Absolute Max. Tuning Voltage (Vtune)	+18V

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

IF/RF MICROWAVE COMPONENTS

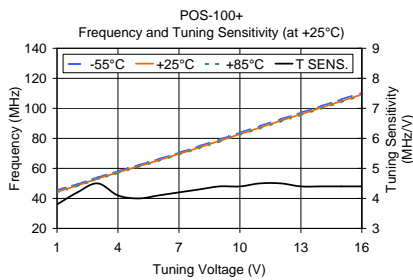
For detailed performance specs & shopping online see web site

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.

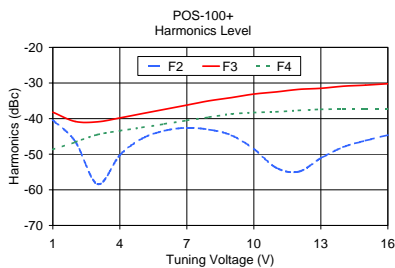
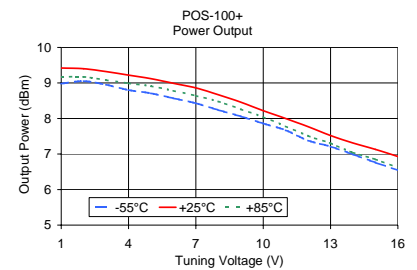
REV. J
M113397
POS-100+
SK/TD/CP/AM
091223
Page 1 of 2

Performance Data & Curves

POS-100+



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	3.80	45.55	44.40	43.93	8.98	9.42	9.17
2.00	4.20	49.41	48.60	48.31	9.05	9.40	9.17
3.00	4.50	53.98	53.15	52.83	8.95	9.32	9.08
4.00	4.10	58.08	57.27	56.90	8.80	9.22	8.99
5.00	4.00	62.10	61.31	60.88	8.71	9.12	8.91
6.00	4.10	66.20	65.43	64.96	8.57	8.99	8.78
7.00	4.20	70.43	69.62	69.13	8.43	8.86	8.64
8.00	4.30	74.80	73.93	73.43	8.24	8.67	8.48
9.00	4.40	79.26	78.33	77.81	8.06	8.46	8.26
10.00	4.40	83.78	82.77	82.25	7.86	8.22	8.04
11.00	4.50	88.26	87.23	86.68	7.67	8.00	7.78
12.00	4.50	92.73	91.69	91.10	7.38	7.77	7.51
13.00	4.40	97.13	96.06	95.46	7.21	7.52	7.30
14.00	4.40	101.53	100.45	99.81	6.99	7.31	7.04
15.00	4.40	105.98	104.84	104.18	6.76	7.13	6.85
16.00	4.40	110.43	109.22	108.55	6.54	6.93	6.61



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.00	-40.40	-38.20	-48.70	0.02
2.00	-46.40	-40.80	-46.60	0.28
3.00	-58.40	-40.90	-44.50	0.22
4.00	-50.30	-39.80	-43.40	0.15
5.00	-45.60	-38.60	-42.50	0.13
6.00	-43.40	-37.40	-41.50	0.12
7.00	-42.60	-36.20	-40.50	0.15
8.00	-43.10	-35.00	-39.60	0.18
9.00	-44.70	-34.10	-38.70	0.22
10.00	-48.50	-33.10	-38.30	0.23
11.00	-53.80	-32.50	-38.10	0.25
12.00	-54.90	-31.80	-37.70	0.24
13.00	-51.10	-31.50	-37.40	0.23
14.00	-48.00	-30.90	-37.30	0.28
15.00	-46.20	-30.60	-37.30	0.32
16.00	-44.60	-30.20	-37.30	0.40

