

Plug-In

Voltage Controlled Oscillator

POS-400+
POS-400

Linear Tuning 200 to 380 MHz

Features

- wideband, 200 to 380 MHz
- excellent harmonic suppression, -28 dBc typ.
- hermetically sealed



CASE STYLE:A06

Applications

- test instruments
- agile communications systems

+ 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

MODEL NO.	FREQ. (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.
POS-400(+)	200	380	+9.5	1	16	-76	-98	-120	-140	1.8	0.3	13.7-16.9	-28	-20	0.1	12	20

Pin Connections

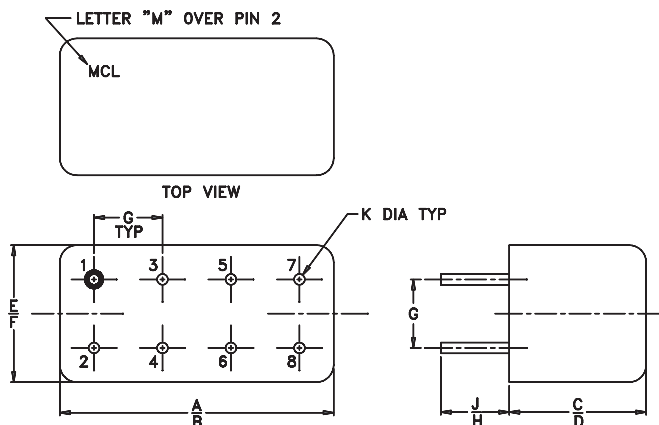
RFOUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

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

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



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

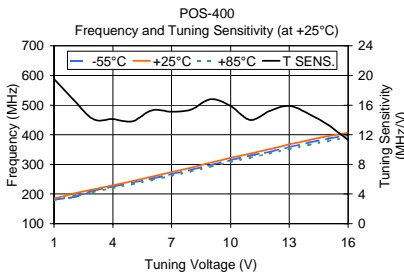
Mini-Circuits ISO 9001 & ISO 14001 Certified

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

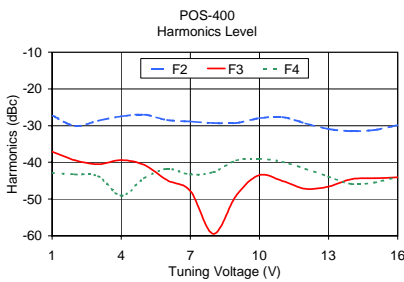
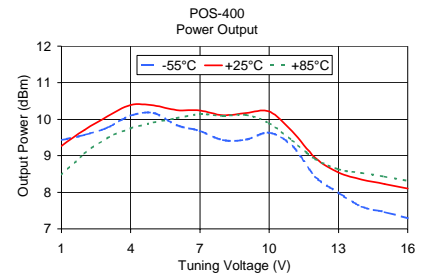
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

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M98898
POS-400
SK/TD/CP/AM
060217
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Performance Curves



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	19.5	181.6	184.8	178.0	9.4	9.2	8.4
2.0	16.7	189.7	201.5	193.3	9.5	9.7	9.0
3.0	14.1	211.2	215.7	207.0	9.7	10.0	9.4
4.0	14.1	224.9	229.8	220.1	10.1	10.3	9.7
5.0	13.8	238.6	243.6	233.2	10.1	10.3	9.9
6.0	15.3	252.5	258.8	247.4	9.8	10.2	10.0
7.0	15.1	267.8	273.9	261.7	9.6	10.2	10.1
8.0	15.4	282.1	289.3	276.4	9.4	10.1	10.0
9.0	16.8	298.3	306.1	292.5	9.4	10.1	10.1
10.0	15.9	314.6	322.0	308.0	9.6	10.2	9.8
11.0	14.0	329.6	336.1	322.2	9.2	9.6	9.4
12.0	15.2	342.4	351.3	336.4	8.4	8.9	8.9
13.0	15.9	358.2	367.1	351.4	7.9	8.5	8.6
14.0	14.8	373.3	382.0	365.8	7.6	8.3	8.5
15.0	13.3	386.9	395.3	378.8	7.4	8.2	8.4
16.0	11.3	398.7	406.6	390.3	7.2	8.1	8.3



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.0	-27.2	-37.1	-42.9	0.62
2.0	-30.1	-39.5	-43.3	0.28
3.0	-28.7	-40.5	-43.8	0.28
4.0	-27.5	-39.4	-49.1	0.10
5.0	-27.0	-40.7	-44.4	0.20
6.0	-28.5	-44.9	-41.8	0.17
7.0	-28.9	-47.8	-43.3	0.02
8.0	-29.3	-59.5	-42.7	0.41
9.0	-29.3	-49.0	-39.5	0.32
10.0	-28.0	-43.5	-39.1	0.18
11.0	-27.7	-45.1	-39.9	0.10
12.0	-29.4	-47.2	-41.8	0.62
13.0	-30.9	-46.6	-43.9	0.53
14.0	-31.5	-44.6	-45.9	0.42
15.0	-31.2	-44.4	-45.5	0.30
16.0	-29.9	-44.1	-44.0	0.20

