

Surface Mount

Linear Tuning 900 to 1000 MHz

- low phase noise, -102 dBc/Hz at 10 KHz offset, typ.
- linear tuning sensitivity, 12-16 MHz/V typ.
- 5V power supply
- aqueous washable
- protected by US patent 6,424,241



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

Applications

- radio
- cellular

Frequency (MHz)		Power Output (dBm)	Tuning Voltage (V)		Phase Noise (dBc/Hz) SSB at offset frequencies: Typ.				Pulling pk-pk @ 12 dB _r (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 _{cc} (volts)	Current (mA) Max.
900	1000	0	0.5	12	-74	-102	-122	-140	1.0	0.4	12-16	-30	-20	8.0	5	25

RF OUT	10
VCC	14
V-TUNE	2
GROUND	1,3,4,5,6,7,8,9,11,12,13,15,16

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+6V
Absolute Max. Tuning Voltage (Vtune)	+15V

all specifications: 50 ohm system
Permanent damage may occur if any of these limits are exceeded.

PCB Land Pattern

Suggested Layout,
Tolerance to be within $\pm.002$

Legend:
 METALLIZATION
 SOLDER RESIST

- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .030" $\pm$.002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

 DENOTES PCB COPPER LAYOUT WITH SMOBC
 (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt.
.500	.500	.180	.100	.080	.115	.060	.040	.540	.060	.100	.135	.135	.115	.150	.070	.150	.070	grams
12.70	12.70	4.57	2.54	2.03	2.92	1.52	1.02	13.72	1.52	2.54	3.43	3.43	2.92	3.46	1.78	3.81	1.78	1.0

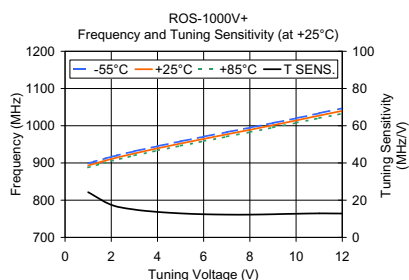
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established and published test procedures and conditions. 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/MC/Store/terms iso.

For detailed performance specs
& shopping online see web site

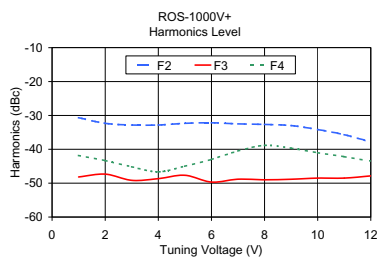
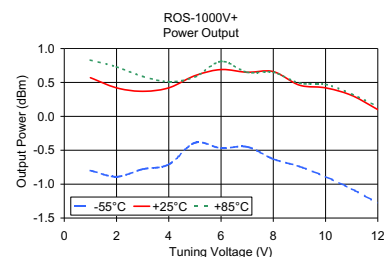
REV. D
M121747
ED-8330/2
ROS-1000V+
MM/TD/CP/AM
090717
Page 1 of 2

Performance Data & Curves

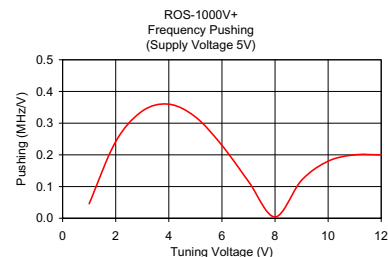
ROS-1000V+



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	24.28	899.10	893.15	887.76	-0.80	0.57	0.83
2.00	17.50	916.42	910.66	905.22	-0.89	0.42	0.73
3.00	14.96	931.38	925.62	920.03	-0.78	0.37	0.59
4.00	13.68	945.08	939.30	933.53	-0.71	0.42	0.51
5.00	12.91	958.03	952.21	946.29	-0.39	0.60	0.58
6.00	12.44	970.51	964.66	958.63	-0.47	0.69	0.81
7.00	12.25	982.75	976.91	970.81	-0.45	0.65	0.65
8.00	12.24	994.95	989.15	982.99	-0.63	0.66	0.65
9.00	12.43	1007.34	1001.58	995.33	-0.74	0.46	0.49
10.00	12.72	1020.15	1014.30	1007.86	-0.89	0.42	0.47
11.00	12.92	1033.49	1027.22	1020.46	-1.07	0.31	0.33
12.00	12.81	1047.09	1040.03	1032.75	-1.28	0.10	0.15



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.00	-30.66	-48.16	-41.83	0.05
2.00	-32.33	-47.33	-43.33	0.24
3.00	-32.84	-49.17	-45.17	0.34
4.00	-32.83	-48.66	-46.66	0.36
5.00	-32.33	-47.67	-45.00	0.32
6.00	-32.17	-49.67	-43.00	0.23
7.00	-32.50	-48.83	-40.50	0.12
8.00	-32.66	-49.00	-38.83	0.00
9.00	-33.00	-48.84	-39.67	0.12
10.00	-34.17	-48.50	-41.00	0.18
11.00	-35.67	-48.50	-42.17	0.20
12.00	-37.83	-47.84	-43.50	0.20



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine www.minicircuits.com Provides ACTUAL Data Instantly at [minicircuits.com](http://www.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.