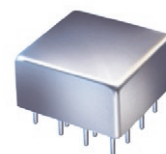


Plug-In Voltage Controlled Oscillator

POSA-960

Low Noise 800 to 960 MHz



CASE STYLE: C07
PRICE: \$49.95 ea. QTY (1-9)

Features

- low phase noise, -150 dBc/Hz at 1 MHz offset, typ.
- medium power, 16 dBm typ.
- load insensitive
- hermetic metal case
- protected by US patent 6,549,084

Applications

- aircraft
- transmitters
- military hi-rel applications

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.	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Vcc (volts)	Current (mA) Max.
800	960	+16	1	15	—	-84	-112	-130	-150	2.0	0.3	17-22	-30	-16	2.0	15	50

Pin Connections

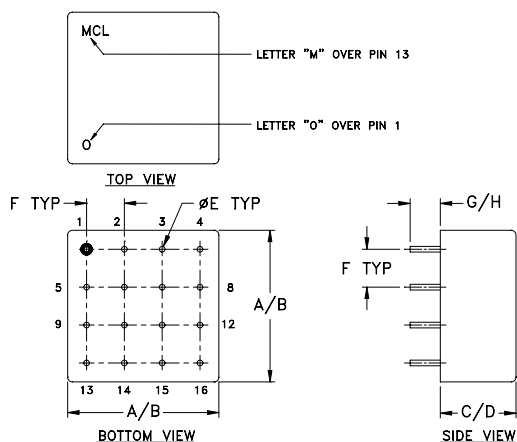
RF OUT	1
VCC	4
V-TUNE	16
GROUND	2,3,5,6,7,8,9,10,11,13,14,15
CASE GROUND	3,5,6,7,8,10,11,14,15

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)	+16V

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	wt
.770	.810	.380	.410	.030	.200	.20	.14	grams
3.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	11.0

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

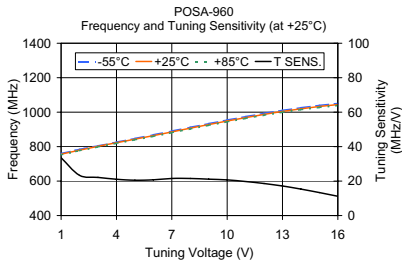
For detailed performance specs & shopping online see web site

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.

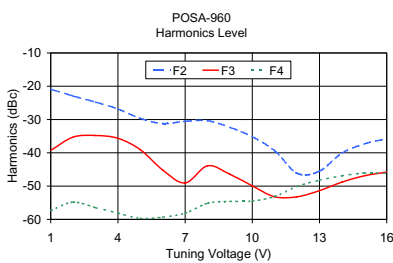
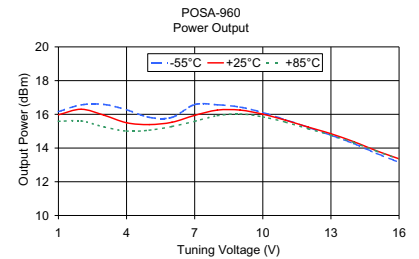
REV. A
M97399
POSA-960
WD/TD/CP/AM
100415

Performance Curves

POSA-960



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	33.54	759.88	756.01	752.26	16.16	15.97	15.59
2.00	23.33	784.47	779.34	776.66	16.56	16.30	15.61
3.00	22.12	804.49	801.46	798.47	16.59	15.95	15.26
4.00	21.09	826.22	822.55	819.18	16.27	15.50	15.01
5.00	20.51	847.23	843.05	839.42	15.82	15.39	15.06
6.00	20.74	868.54	863.80	859.85	15.82	15.53	15.28
7.00	21.51	890.38	885.31	880.98	16.58	15.94	15.59
8.00	21.53	912.27	906.84	902.61	16.57	16.25	15.92
9.00	21.11	933.89	927.95	923.68	16.43	16.25	16.02
10.00	20.68	954.72	948.63	944.22	16.11	16.01	15.85
11.00	19.77	974.59	968.40	963.92	15.68	15.65	15.54
12.00	18.61	993.27	987.01	982.49	15.23	15.24	15.14
13.00	17.14	1010.55	1004.15	999.52	14.76	14.85	14.77
14.00	15.37	1026.12	1019.52	1014.67	14.27	14.38	14.33
15.00	13.35	1039.70	1032.88	1027.72	13.69	13.84	13.82
16.00	11.20	1051.14	1044.08	1038.61	13.16	13.36	13.35



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.00	-20.88	-39.26	-57.31	0.44
2.00	-22.92	-35.29	-54.82	0.37
3.00	-24.74	-34.80	-56.46	0.38
4.00	-26.81	-35.64	-58.10	0.31
5.00	-29.65	-39.05	-59.69	0.18
6.00	-31.20	-45.16	-59.34	0.08
7.00	-30.53	-49.06	-58.12	0.06
8.00	-30.33	-43.90	-55.13	0.24
9.00	-32.34	-46.44	-54.60	0.33
10.00	-35.16	-49.95	-54.52	0.36
11.00	-39.39	-53.21	-53.10	0.29
12.00	-46.15	-53.22	-50.12	0.23
13.00	-45.51	-51.36	-48.22	0.17
14.00	-40.11	-48.81	-46.91	0.22
15.00	-37.32	-46.90	-46.06	0.35
16.00	-35.77	-45.78	-46.11	0.40

