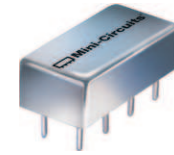


Plug-In

# Voltage Controlled Oscillator

POS-2120W+

Wideband 1060 to 2120 MHz



CASE STYLE: A06  
PRICE: \$ 21.95 ea. QTY(5-49)

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

## Features

- octave frequency range
- 3 dB modulation bandwidth, 1 MHz typ.
- low phase noise
- output suitable for LO drive to 7 dBm mixers
- hermetically sealed

## Applications

- test instruments-signal generators
- wideband frequency synthesizers
- agile communications systems
- cellular up and down converters

## 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.
1060	2120	+8.0	0.5	20	-70	-97	-117	-137	27.0	2.5	35-120	-11	—	1.0	12	28

## Pin Connections

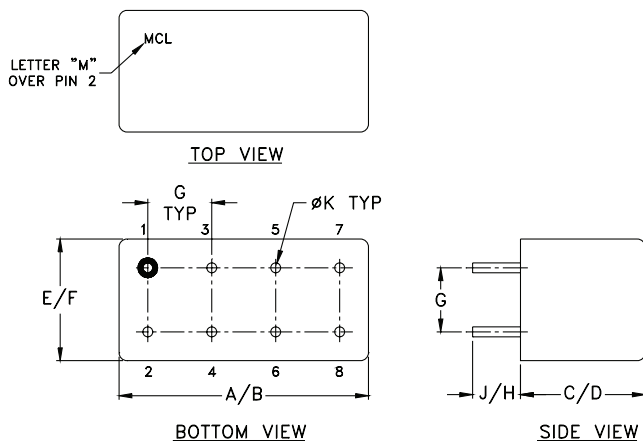
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

## Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+15V
Absolute Max. Tuning Voltage (Vtune)	+25V

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

### Notes

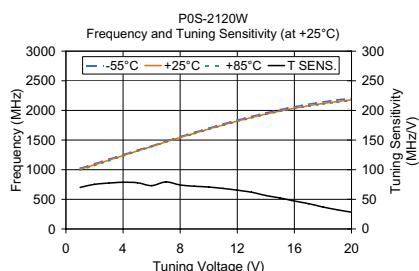
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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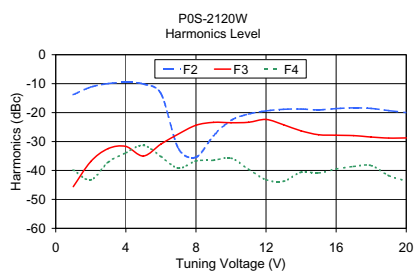
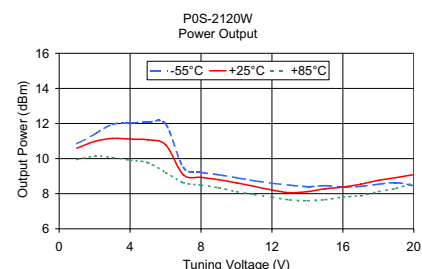
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 35166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

# Performance Data & Curves

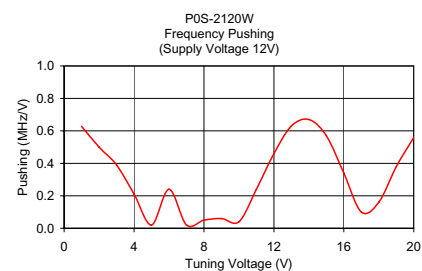
# POS-2120W+



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	70.10	1024.07	1006.92	990.45	10.84	10.59	9.95
2.00	75.32	1098.83	1082.24	1067.13	11.40	10.98	10.14
3.00	77.40	1176.13	1159.63	1146.80	11.95	11.15	10.06
4.00	78.76	1253.19	1238.39	1227.80	12.03	11.11	9.91
5.00	77.99	1329.27	1316.38	1308.07	12.07	11.07	9.77
6.00	73.08	1400.26	1389.46	1385.25	11.97	10.79	9.21
7.00	79.36	1480.48	1468.83	1461.52	9.50	9.08	8.63
8.00	74.19	1556.33	1543.02	1534.97	9.22	8.93	8.49
9.00	72.06	1629.11	1615.09	1606.70	9.08	8.80	8.34
10.00	70.78	1700.49	1685.86	1677.24	8.91	8.62	8.12
11.00	68.35	1769.82	1754.22	1745.31	8.74	8.42	7.96
12.00	65.44	1836.10	1819.65	1810.74	8.60	8.21	7.80
13.00	61.98	1899.35	1881.64	1872.91	8.49	8.06	7.65
14.00	56.48	1958.14	1938.11	1929.74	8.40	8.12	7.60
15.00	52.27	2012.15	1990.39	1982.21	8.46	8.28	7.66
16.00	47.11	2061.72	2037.50	2028.82	8.39	8.38	7.81
17.00	42.62	2105.52	2080.12	2070.90	8.42	8.54	7.89
18.00	37.02	2143.19	2117.14	2106.57	8.54	8.76	8.12
19.00	32.29	2177.76	2149.43	2137.26	8.63	8.92	8.31
20.00	28.29	2203.05	2177.72	2165.17	8.45	9.09	8.61



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
1.00	-13.79	-45.60	-39.81	0.63
2.00	-11.19	-36.91	-43.23	0.50
3.00	-9.96	-32.43	-37.10	0.39
4.00	-9.57	-31.70	-33.92	0.21
5.00	-10.10	-35.01	-31.29	0.02
6.00	-13.44	-30.89	-35.16	0.24
7.00	-32.47	-27.41	-39.19	0.02
8.00	-35.41	-24.39	-36.70	0.05
9.00	-28.02	-23.37	-36.47	0.06
10.00	-22.69	-23.51	-35.73	0.04
11.00	-20.51	-23.34	-39.57	0.24
12.00	-19.40	-22.36	-43.18	0.46
13.00	-18.85	-24.20	-43.73	0.63
14.00	-18.77	-26.31	-40.62	0.67
15.00	-19.05	-27.64	-40.84	0.57
16.00	-18.60	-27.83	-39.48	0.34
17.00	-18.36	-27.95	-38.62	0.10
18.00	-18.55	-28.45	-38.27	0.16
19.00	-19.31	-28.80	-41.78	0.38
20.00	-20.01	-28.75	-43.63	0.56



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