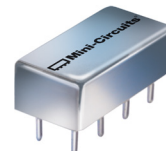


Plug-In

Voltage Controlled Oscillator

POS-50P+

5V Tuning for PLL IC's 24 to 29 MHz



CASE STYLE: A06

Features

- 5V tuning voltage range
- low phase noise, -110 dBc at 10 kHz offset, typ.
- hermetically sealed

Applications

- PLL circuitry
- measurement instrumentation
- frequency synthesizers

+RoHS Compliant

The +Suffix identifies 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.
24	29	+9.5	0.5	5.0	-90	-110	-130	-150	0.03	0.04	2-2.5	-18	-12	0.1	12	20

Pin Connections

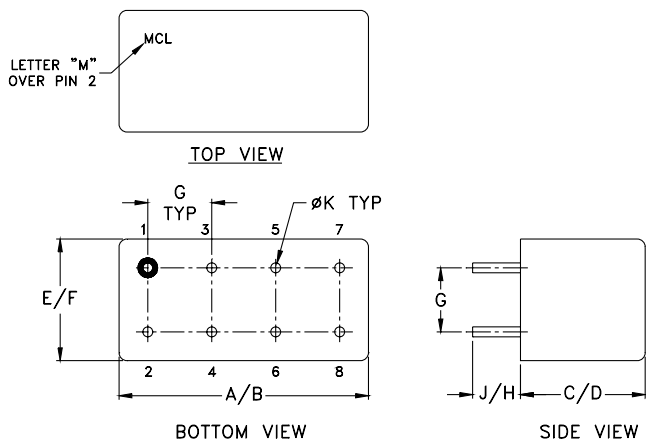
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

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)	+7V

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

Outline Drawing



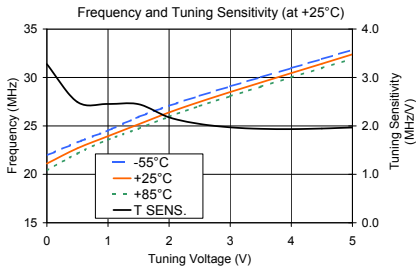
Outline Dimensions (inch/mm)

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

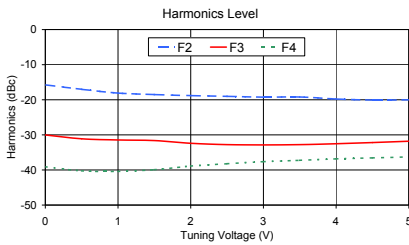
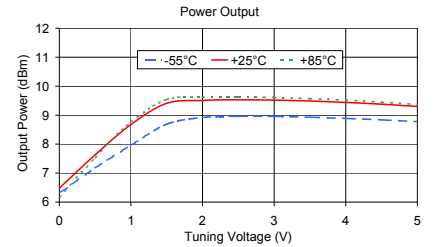
Notes

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- The parts covered by this specification document 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

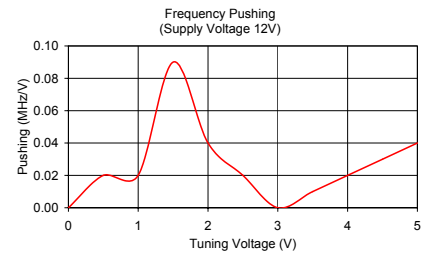




V TUNE	TUNING SENS. (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)		
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C
0.50	2.49	23.30	22.69	22.15	7.18	7.63	7.54
1.00	2.45	24.53	23.94	23.56	7.96	8.68	8.76
1.50	2.45	25.92	25.16	24.71	8.69	9.41	9.54
2.00	2.18	27.07	26.39	25.96	8.92	9.51	9.62
2.50	2.04	28.10	27.48	27.05	8.96	9.53	9.63
3.00	1.97	29.08	28.50	28.07	8.96	9.52	9.61
3.50	1.94	30.02	29.48	29.05	8.93	9.49	9.57
4.00	1.93	30.96	30.45	30.01	8.89	9.44	9.52
4.50	1.94	31.90	31.42	30.97	8.84	9.38	9.45
5.00	1.97	32.84	32.39	31.93	8.78	9.30	9.37



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
0.50	-17.02	-31.11	-40.23	0.02
1.00	-18.08	-31.45	-40.40	0.02
1.50	-18.51	-31.62	-39.92	0.09
2.00	-18.80	-32.39	-38.89	0.04
2.50	-19.01	-32.78	-38.22	0.02
3.00	-19.24	-32.78	-37.63	0.00
3.50	-19.20	-32.87	-37.24	0.01
4.00	-19.77	-32.52	-36.82	0.02
4.50	-20.07	-32.18	-36.54	0.03
5.00	-19.99	-31.81	-36.27	0.04



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