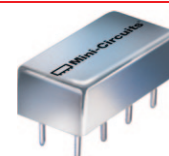


# Plug-In Voltage Controlled Oscillator

## POS-75P+ POS-75P

### 5V Tuning for PLL IC's 35 to 43 MHz



CASE STYLE: A06  
PRICE: \$12.95 ea. QTY (5-49)

#### Features

- 5V tuning voltage range
- low phase noise
- hermetically sealed

#### Applications

- PLL circuitry
- measurement instrumentation
- 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.
35	43	9	0.5	5.0	-91	-113	-135	-151	0.15	0.11	2.5-4.0	-25	-20	0.1	12	20

#### Pin Connections

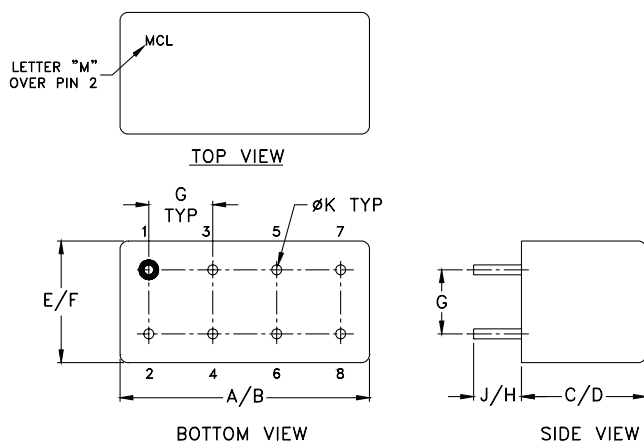
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

#### 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

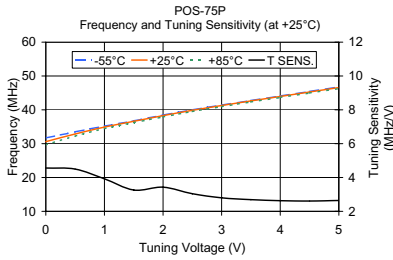
#### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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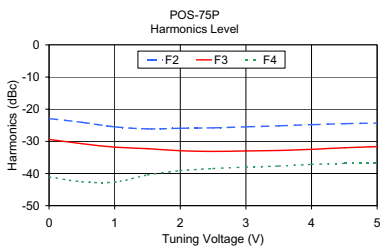
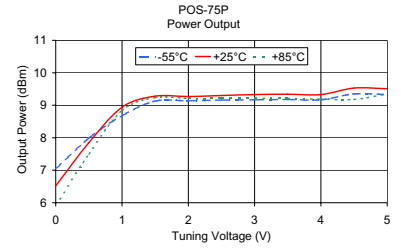


# Performance Data & Curves

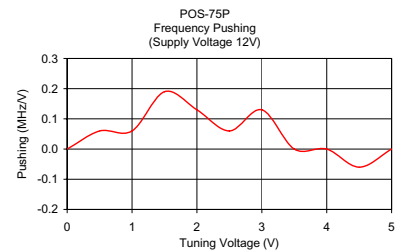
# POS-75P+ POS-75P



V TUNE	TUNING SENS. (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)		
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C
0.00	4.56	31.69	30.60	29.65	7.04	6.52	5.91
0.50	4.50	33.49	32.86	32.22	7.99	7.85	7.50
1.00	3.92	35.18	34.90	34.44	8.68	8.94	8.84
1.50	3.26	36.74	36.61	36.22	9.13	9.28	9.24
2.00	3.43	38.45	38.30	37.90	9.14	9.27	9.21
2.50	3.04	39.99	39.86	39.51	9.16	9.30	9.21
3.00	2.80	41.40	41.28	40.95	9.17	9.33	9.21
3.50	2.69	42.76	42.63	42.32	9.18	9.34	9.21
4.00	2.63	44.10	43.96	43.66	9.17	9.33	9.19
4.50	2.61	45.43	45.26	44.98	9.35	9.53	9.18
5.00	2.64	46.78	46.59	46.30	9.33	9.51	9.35



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
0.00	-22.90	-29.40	-41.07	0.00
0.50	-24.07	-30.73	-42.57	0.06
1.00	-25.49	-31.82	-42.66	0.06
1.50	-26.11	-32.27	-40.44	0.19
2.00	-25.93	-32.93	-39.10	0.13
2.50	-25.79	-33.13	-38.46	0.06
3.00	-25.49	-32.99	-37.99	0.13
3.50	-25.17	-32.83	-37.67	0.00
4.00	-24.82	-32.49	-37.16	0.00
4.50	-24.50	-32.00	-36.83	-0.06
5.00	-24.31	-31.65	-36.81	0.00



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