Surface Mount

Voltage Controlled Oscillator

POS-535+

Linear Tuning 300 to 525 MHz

CASE STYLE: A06
PRICE: $ 13.95 ea. QTY (5-49)

Features
- low load pull, 0.6 MHz typ.
- low phase noise, -145 dBc/Hz at 1 MHz offset, typ.
- output suitable for LO drive to mixers
- hermetically sealed

Applications
- VHF/UHF receivers/transmitters
- test instruments
- wideband frequency synthesizers

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

Electrical Specifications

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies,kHz Typ.				TUNING VOLTAGE RANGE (V)		SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	NON HARMONIC SPURIOUS (dBc)	HARMONICS* (dBc)		PULLING pk-pk @12 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER Vcc (volts)	DC OPERATING POWER Current (mA)
	Min.	Max.	Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Typ.		Max.
POS-535+	300	525	+8.5	-72	-97	-120	-145	1	16	17 - 23	350	0.1	-90	-32	-20	0.6	0.6	12	20

*Second & Third Harmonics

Pin Connections

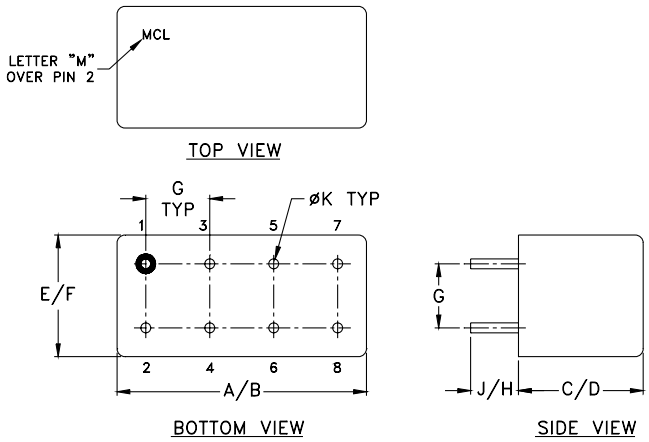
RF OUT	2
VCC	1
V-TUNE	8
GROUND	3,4,5,6,7
CASE GROUND	3,4,5,6,7

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)	+18V

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
19.56	20.32	7.24	7.87	9.40	10.16	5.08	5.08	3.56	0.79	5.2

Notes
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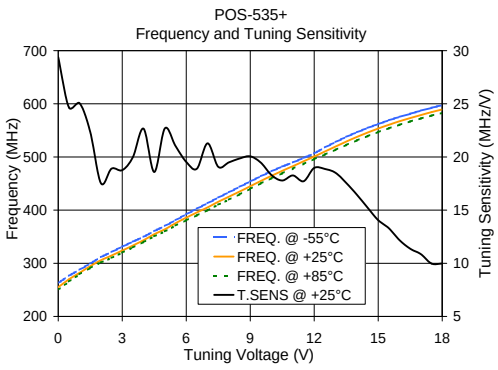
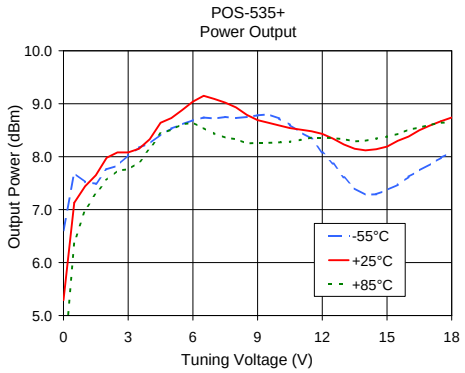
Performance Data & Curves*

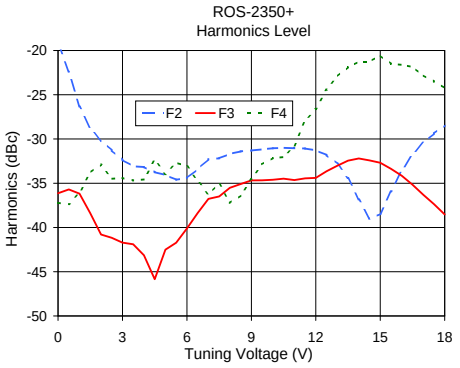
POS-535+

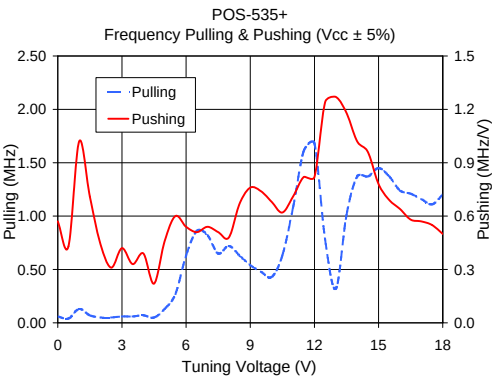
V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 3880 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	29.39	262.8	255.1	250.1	6.61	5.29	3.95	16.39	-19.1	-36.1	-37.2	0.57	0.06	-71.07	-93.5	-114.5	-136.3	1.0	-69.11
1.00	25.06	287.7	282.1	279.2	7.52	7.44	6.99	16.30	-26.3	-36.2	-36.1	1.02	0.13	-75.14	-99.0	-120.3	-141.6	2.0	-78.75
2.00	17.53	311.6	305.8	301.6	7.76	7.98	7.56	16.21	-30.2	-40.8	-32.9	0.44	0.05	-74.57	-99.0	-121.2	-147.0	3.5	-85.24
3.00	18.76	331.1	324.0	320.1	8.03	8.08	7.76	15.98	-32.4	-41.7	-34.4	0.42	0.06	-72.18	-97.1	-120.3	-147.1	6.0	-90.43
4.00	22.66	349.7	343.4	340.0	8.25	8.33	8.15	15.81	-33.2	-43.1	-34.6	0.39	0.07	-73.35	-98.3	-120.3	-142.6	8.5	-94.07
5.00	22.69	370.3	364.0	360.0	8.53	8.73	8.51	15.70	-34.1	-42.5	-34.0	0.46	0.13	-72.63	-98.6	-120.6	-144.6	10.0	-95.62
6.00	19.54	392.1	385.9	380.9	8.69	9.04	8.64	15.61	-34.4	-40.1	-33.1	0.54	0.63	-72.18	-97.1	-119.9	-146.5	20.8	-102.60
6.50	18.90	402.8	395.6	390.2	8.74	9.15	8.54	15.53	-33.4	-38.4	-34.7	0.51	0.86	-72.13	-96.7	-119.2	-146.0	35.5	-107.62
7.00	21.28	412.9	405.1	399.7	8.72	9.09	8.43	15.43	-32.3	-36.8	-36.3	0.54	0.82	-72.52	-95.9	-118.9	-145.9	60.7	-112.84
7.50	19.08	423.4	415.7	410.2	8.75	9.02	8.36	15.38	-32.2	-36.5	-35.0	0.51	0.65	-71.22	-96.4	-119.3	-145.2	86.7	-116.69
8.50	19.86	443.7	435.0	429.6	8.75	8.79	8.25	15.24	-31.4	-35.1	-36.4	0.67	0.63	-71.02	-96.3	-118.9	-145.8	100.0	-118.23
9.00	20.06	453.9	444.9	440.0	8.78	8.69	8.26	15.18	-31.3	-34.7	-34.5	0.76	0.54	-71.46	-95.9	-119.3	-145.7	148.1	-122.90
10.00	18.29	473.2	464.7	460.0	8.72	8.59	8.27	15.08	-31.1	-34.6	-32.2	0.68	0.43	-74.40	-97.8	-120.2	-144.9	177.0	-125.06
10.50	17.78	481.9	473.8	469.2	8.60	8.54	8.28	15.03	-31.0	-34.5	-32.0	0.62	0.63	-73.81	-98.2	-120.9	-144.9	211.6	-127.32
11.00	18.26	489.7	482.7	478.1	8.46	8.51	8.32	14.97	-31.1	-34.6	-30.8	0.71	1.08	-75.24	-98.7	-120.8	-143.8	302.4	-131.53
12.00	18.97	506.9	500.7	496.0	8.08	8.43	8.36	14.87	-31.3	-34.4	-26.6	0.82	1.68	-75.28	-98.8	-120.6	-142.9	361.5	-133.62
13.00	18.51	528.0	519.6	513.6	7.61	8.23	8.33	14.81	-32.8	-33.0	-22.9	1.27	0.32	-71.46	-95.7	-118.4	-142.2	507.5	-137.35
14.00	16.45	546.4	537.7	531.1	7.28	8.12	8.30	14.79	-36.8	-32.2	-21.3	1.02	1.37	-72.10	-95.2	-118.6	-142.3	606.7	-139.15
15.00	14.06	561.9	553.5	547.0	7.37	8.19	8.38	14.76	-38.5	-32.7	-20.6	0.78	1.45	-71.00	-96.7	-119.4	-142.7	851.6	-142.34
16.00	12.17	575.3	567.2	560.6	7.62	8.38	8.51	14.72	-33.6	-34.2	-21.6	0.64	1.24	-72.61	-97.4	-119.7	-142.5	1000.0	-143.78

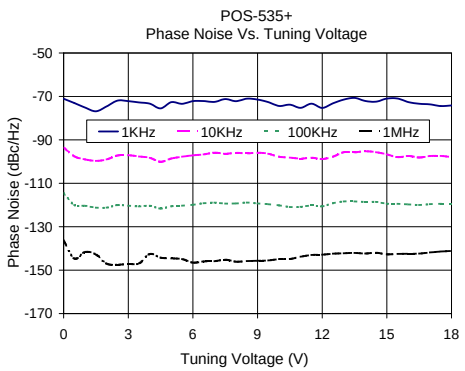
*at 25°C unless mentioned otherwise

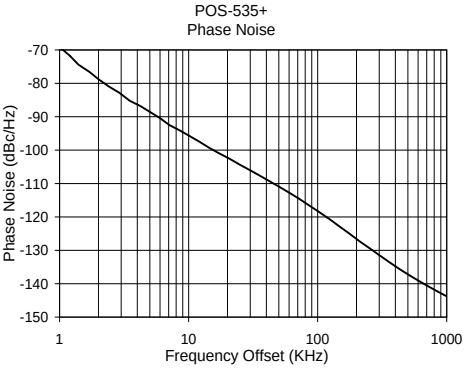












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