

Surface Mount

Voltage Controlled Oscillator

MOS-1632-119+

5V Tuning for PLL IC's 1556 to 1632 MHz



CASE STYLE: CZ682

Features

- linear tuning characteristics
- low phase noise
- low pulling
- low pushing
- aqueous washable

Applications

- wireless communications
- test equipment
- radar & navigation systems

+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				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Max.			Typ.	Max.
MOS-1632-119+	1556	1632	+4.5	-83	-110	-130	-150	0.5	4.5	31-35	18	60	-90	-19	-10	1	0.3	5	36

Pin Connections

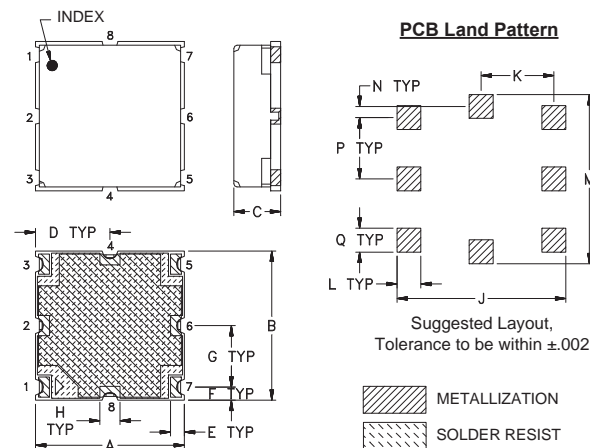
RF OUT	5
VCC	3
V-TUNE	1
GROUND	2,4,6,7,8

Maximum Ratings

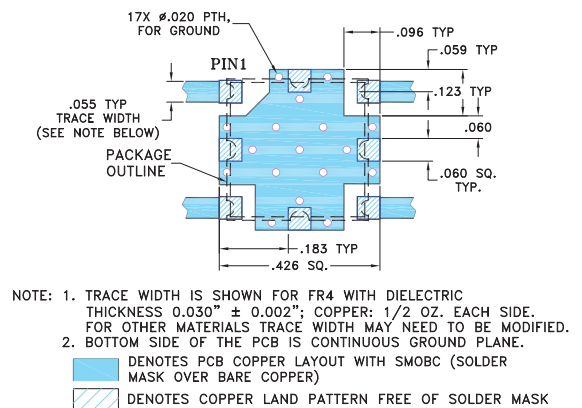
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



Demo Board MCL P/N: TB-128 Suggested PCB Layout (PL-023)



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	wt. grams
.375	.375	.131	.188	.035	.033	.154	.050	.425	.183	.060	.425	.028	.154	.060	.60
9.52	9.52	3.33	4.77	0.89	0.84	3.91	1.27	10.80	4.65	1.52	10.80	0.71	3.91	1.52	

Notes

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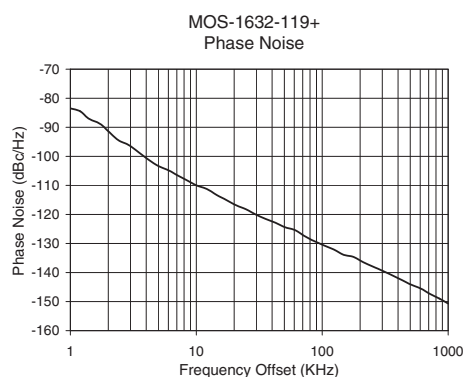
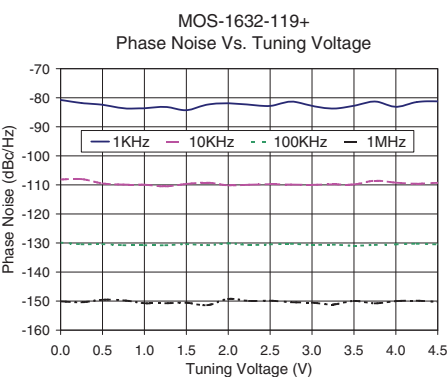
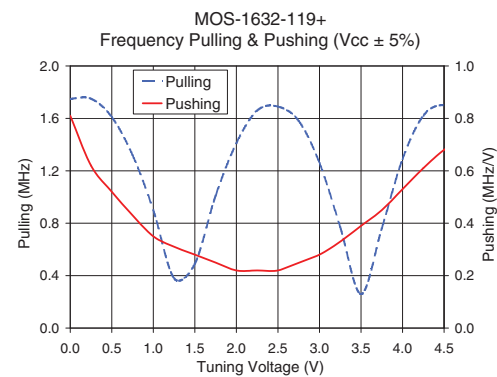
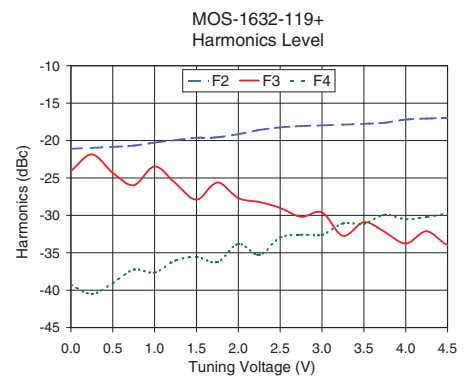
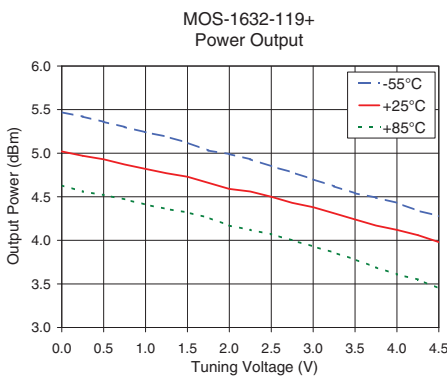
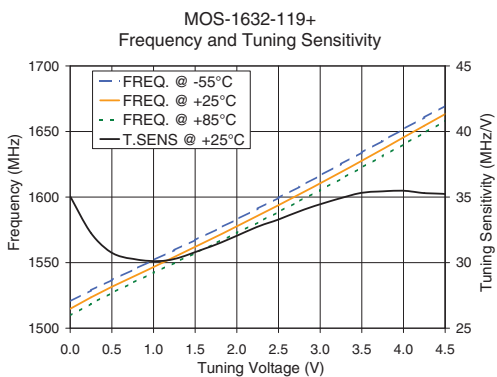
REV. B
M151108
EDR-8715F1
MOS-1632-119+
RAV
150512
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Performance Data & Curves*

MOS-1632-119+

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 1594 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1KHz	10KHz	100KHz	1MHz		
0.00	35.05	1520.4	1514.8	1509.6	5.47	5.02	4.63	30.20	-21.1	-24.1	-39.3	0.81	1.75	-80.8	-108.1	-129.9	-150.1	1.0	-83.46
0.25	32.26	1528.9	1523.5	1518.7	5.42	4.97	4.56	30.19	-21.0	-21.9	-40.5	0.62	1.75	-81.8	-108.0	-130.4	-150.4	2.0	-91.36
0.50	30.75	1536.8	1531.6	1526.9	5.36	4.93	4.52	30.19	-20.9	-24.3	-39.1	0.52	1.61	-82.4	-109.5	-130.4	-149.5	3.5	-98.67
0.75	30.29	1544.4	1539.3	1534.6	5.30	4.87	4.47	30.17	-20.7	-26.0	-37.3	0.43	1.32	-83.6	-109.9	-130.7	-149.7	6.0	-104.78
1.00	30.12	1552.0	1546.9	1542.2	5.24	4.82	4.41	30.18	-20.3	-23.5	-37.6	0.35	0.90	-83.6	-110.0	-130.7	-150.7	8.5	-108.34
1.25	30.27	1559.6	1554.4	1549.8	5.19	4.77	4.36	30.18	-19.9	-25.7	-36.0	0.31	0.38	-83.2	-110.5	-130.8	-150.8	10.0	-109.98
1.50	30.81	1567.2	1562.0	1557.3	5.12	4.73	4.32	30.17	-19.6	-27.9	-35.6	0.28	0.49	-84.3	-109.7	-130.4	-150.6	20.8	-116.90
1.75	31.38	1575.1	1569.7	1564.9	5.03	4.66	4.26	30.17	-19.6	-25.6	-36.3	0.25	1.01	-82.4	-109.2	-130.8	-151.4	35.5	-121.53
2.00	32.05	1583.0	1577.5	1572.6	4.99	4.59	4.17	30.16	-19.1	-27.7	-33.8	0.22	1.41	-81.9	-110.2	-130.1	-149.3	60.7	-125.39
2.25	32.74	1591.1	1585.5	1580.6	4.93	4.56	4.12	30.16	-18.6	-28.2	-35.3	0.22	1.66	-82.4	-109.9	-130.7	-149.9	86.7	-129.27
2.50	33.29	1599.4	1593.7	1588.7	4.85	4.50	4.07	30.16	-18.2	-29.0	-33.0	0.22	1.69	-82.8	-109.8	-130.5	-149.9	100.0	-130.39
2.75	33.92	1607.9	1602.0	1596.9	4.78	4.43	4.00	30.15	-18.1	-30.2	-32.6	0.25	1.58	-81.3	-109.9	-130.3	-150.4	177.0	-134.61
3.00	34.45	1616.5	1610.5	1605.3	4.70	4.38	3.93	30.15	-18.0	-29.6	-32.6	0.28	1.26	-82.8	-110.0	-130.7	-150.6	211.6	-136.45
3.25	34.93	1625.2	1619.1	1613.9	4.62	4.31	3.86	30.14	-17.9	-32.7	-31.1	0.33	0.77	-83.7	-109.8	-130.6	-151.2	302.4	-139.41
3.50	35.32	1634.0	1627.9	1622.5	4.54	4.24	3.78	30.14	-17.8	-30.9	-31.1	0.39	0.26	-82.8	-109.9	-130.9	-149.9	361.5	-141.02
3.75	35.44	1642.9	1636.7	1631.3	4.49	4.17	3.69	30.13	-17.6	-32.2	-29.9	0.45	0.76	-81.3	-108.5	-130.7	-150.8	507.5	-144.16
4.00	35.49	1651.9	1645.5	1640.2	4.43	4.12	3.61	30.13	-17.2	-33.8	-30.5	0.53	1.29	-83.1	-109.2	-130.5	-150.0	606.7	-145.50
4.25	35.30	1660.8	1654.4	1649.0	4.34	4.06	3.55	30.12	-17.1	-32.1	-30.2	0.61	1.62	-81.5	-109.6	-130.3	-149.9	851.6	-148.96
4.50	35.23	1669.6	1663.2	1657.9	4.28	3.98	3.45	30.11	-17.0	-33.9	-29.8	0.68	1.70	-81.2	-109.3	-130.5	-150.3	1000.0	-150.67

*at 25°C unless mentioned otherwise



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