

Voltage Controlled Oscillator

MOS-1826PV+ MOS-1826PV

5V Tuning for PLL IC's 1766 to 1826 MHz

Features

- wide modulation bandwidth, 10 MHz typ.
- small package, .375"X.375"
- aqueous washable

Applications

- DCS/GSM



CASE STYLE: CZ682

PRICE: \$19.95 ea. QTY (5-49)

**+ RoHS compliant in accordance
with EU Directive (2002/95/EC)**

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

Electrical Specifications

MODEL NO.	FREQ. (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.		Min.	Max.	1 kHz	10 kHz	100 kHz	1 MHz				Typ.	Max.		Vcc (volts)	Current (mA)
MOS-1826PV(+)	1766	1826	+2	0.5	5	-75	-101	-122	-142	8.0	1.0	21-35	-28	-15	10	5	25

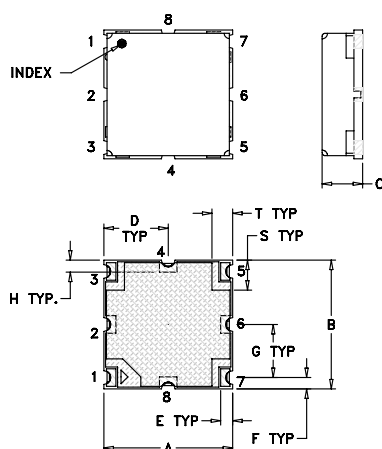
Pin Connections

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

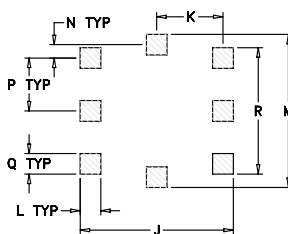
Maximum Ratings

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)	+6V
all specifications: 50 ohm system	

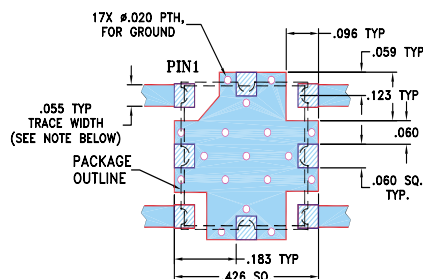
Outline Drawing



SUGGESTED LAYOUT FOR P.C. PATTERN



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



NOTE: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.030" ± 0.002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

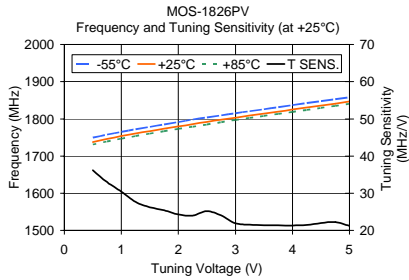
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Outline Dimensions (inch)

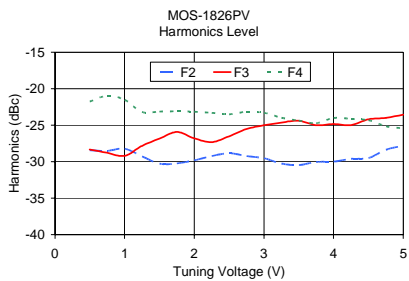
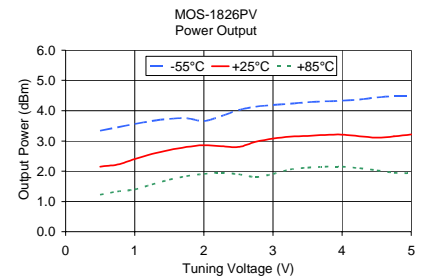
A	B	C	D	E	F	G	H	J	K
.375	.375	.131	.188	.035	.033	.154	.040	.446	.193
9.53	9.53	3.33	4.78	0.89	0.84	3.91	1.02	11.33	4.90
L	M	N	P	Q	R	S	T	wt	
.060	.446	.039	.154	.060	.368	.087	.060	grams	
1.52	11.33	0.99	3.91	1.52	9.35	2.21	1.52	0.60	

Performance Curves

MOS-1826PV+ MOS-1826PV



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	36.17	1749.7	1737.9	1731.1	3.34	2.15	1.22
0.75	32.98	1757.7	1746.1	1739.2	3.45	2.22	1.33
1.00	30.44	1765.1	1753.7	1746.9	3.56	2.40	1.40
1.25	27.68	1772.0	1760.7	1754.0	3.66	2.57	1.56
1.50	26.25	1778.6	1767.2	1760.7	3.73	2.70	1.72
1.75	25.44	1785.0	1773.6	1767.0	3.75	2.80	1.84
2.00	24.30	1791.5	1779.6	1773.2	3.66	2.86	1.91
2.25	24.02	1798.3	1785.7	1779.1	3.82	2.83	1.95
2.50	25.22	1804.0	1792.0	1785.0	4.02	2.80	1.90
2.75	24.04	1809.6	1798.0	1791.0	4.13	2.97	1.81
3.00	21.96	1815.1	1803.5	1797.2	4.19	3.08	1.91
3.25	21.57	1820.6	1808.9	1802.7	4.23	3.14	2.06
3.50	21.43	1826.0	1814.2	1808.0	4.28	3.17	2.12
3.75	21.38	1831.5	1819.6	1813.4	4.31	3.20	2.15
4.00	21.36	1837.0	1824.9	1818.7	4.33	3.21	2.15
4.25	21.54	1842.5	1830.3	1824.1	4.37	3.16	2.10
4.50	22.00	1847.8	1835.8	1829.5	4.44	3.11	2.03
4.75	22.28	1853.0	1841.3	1835.0	4.48	3.15	1.95
5.00	21.24	1858.2	1846.7	1840.6	4.48	3.22	1.93



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
0.50	-28.44	-28.32	-21.77	-0.10
0.75	-28.51	-28.79	-20.98	-0.12
1.00	-28.23	-29.20	-21.54	-0.11
1.25	-29.27	-27.83	-23.21	-0.11
1.50	-30.27	-26.85	-23.14	-0.11
1.75	-30.23	-25.93	-23.11	-0.11
2.00	-29.82	-26.81	-23.16	-0.11
2.25	-29.23	-27.32	-23.32	-0.11
2.50	-28.85	-26.52	-23.51	-0.12
2.75	-29.23	-25.53	-23.17	-0.10
3.00	-29.53	-25.02	-23.31	-0.09
3.25	-30.26	-24.64	-23.99	-0.09
3.50	-30.46	-24.40	-24.37	-0.08
3.75	-30.04	-25.01	-24.73	-0.08
4.00	-29.98	-24.85	-24.01	-0.08
4.25	-29.61	-24.99	-24.14	-0.08
4.50	-29.49	-24.20	-24.32	-0.07
4.75	-28.38	-24.01	-25.16	-0.07
5.00	-27.79	-23.55	-25.43	-0.06

