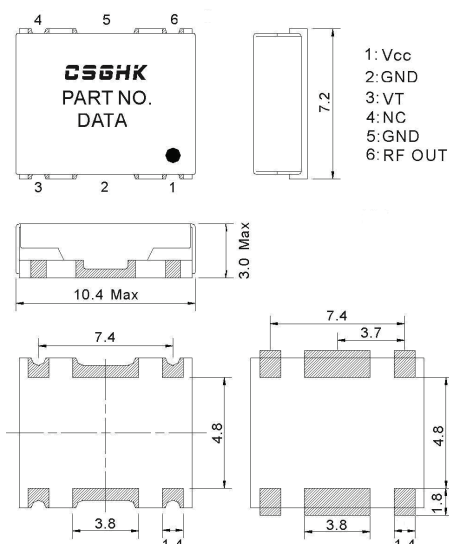




SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 553-634MHz

VP594M



FEATURES

- ▶ Miniature Size
- ▶ Surface Mount Package
- ▶ Low Phase Noise Performance
- ▶ Electrically Shielded
- ▶ Highly Linear Tuning

Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{CC} = +5.0\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		553		634	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	553-634MHz	0.0		4.0	dBm
Supply Voltage (Vcc)		4.75	5.0	5.25	V
Supply Current (Icc)			19	22	mA
Phase Noise :					
	@12.5kHz Offset:		-111	-108	dBc/Hz
	@100kHz Offset:		-132	-129	dBc/Hz
Average Tuning Sensitivity	553-634MHz		25.7		MHz/V
Harmonic Outputs			-5		dBc
OperatingTemperature Range		-40		+85	°C
Tune Input Capacitance			68		PF
Output Impedance -			50		Ω

Comments

X Indicates parameter to be tested 100% in production

V	TUNING	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
TUNE	SENS.							2 ⁿ		
	(MHz/V)	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.5	28.4	544.4	542.0	539.2	1.1	0.6	0.4	-7.2	-8.1	-10.2
1.0	26.1	558.0	555.8	553.3	1.2	0.8	0.6	-8.0	-8.8	-10.6
1.5	25.6	571.0	568.5	565.8	1.4	1.0	0.8	-8.5	-9.2	-10.8
2.0	25.0	583.8	581.1	578.4	1.6	1.2	0.9	-9.0	-9.7	-11.0
2.5	24.9	596.6	593.7	591.2	1.7	1.3	1.0	-9.4	-10.0	-11.1
3.0	25.9	609.8	606.6	604.0	1.8	1.5	1.1	-9.8	-10.4	-11.1
3.5	25.5	622.4	619.5	616.8	1.9	1.6	1.2	-10.0	-10.4	-11.2
4.0	25.6	635.4	632.3	629.6	2.0	1.7	1.4	-10.2	-10.3	-11.3
4.5	25.6	648.8	645.1	642.6	2.0	1.8	1.4	-10.0	-10.3	-11.4

Phase Noise [dBc/Hz]

RF Atten 5 dB

Top -70 dBc/Hz

