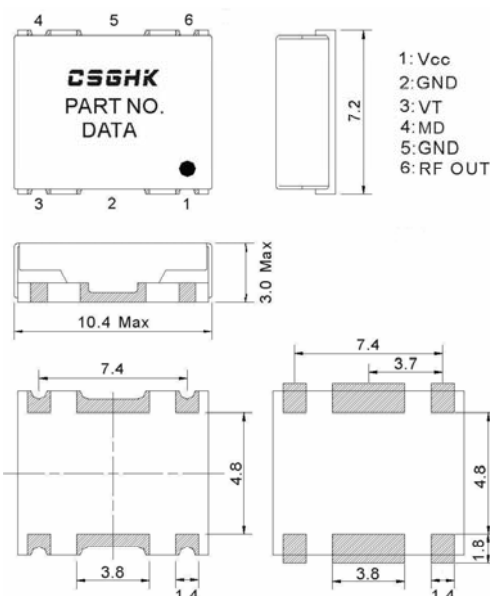


SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 1430-1470MHz

U1450MT



FEATURES

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

Electrical Specifications, T_A = +25°C, V_{CC} = +5.0V (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		1430		1470	MHz
Tuning Voltage (V)		0.8		4.2	V
RF Output Power	1430-1470MHz	0.0		4.0	dBm
Supply Voltage (V _{CC})		4.75	5.0	5.25	V
Supply Current (I _{CC})			17	20	mA
Phase Noise :					
	@10kHz Offset:		-107	-104	dBc/Hz
	@100kHz Offset:		-128	-125	dBc/Hz
Average Tuning Sensitivity	1430-1470MHz		27.4		MHz/V
Modulation deviation	@Freq:1kHz Ampl:3.3V	±1.5			MHz
Harmonic Outputs			-10		dBc
Operating Temperature Range		-40		+85	°C
Tune Input Capacitance			22		PF
Output Impedance -			50		Ω

Comments

X Indicates parameter to be tested 100% in production

V TUNE	TUNING SENS. (MHz/V)	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
		-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.8	31.5	1410.0	1401.2	1395.8	3.0	2.7	1.7	-10.9	-13.6	-20.1
1.0	29.5	1416.2	1407.6	1401.6	2.9	2.8	1.6	-11.1	-13.5	-20.0
1.5	29.0	1431.0	1422.2	1416.4	2.8	2.7	1.8	-11.4	-13.5	-20.2
2.0	27.6	1445.0	1435.8	1430.4	2.8	2.7	1.6	-11.3	-13.6	-20.4
2.5	27.0	1459.0	1449.6	1443.0	2.8	2.7	1.6	-11.3	-13.6	-20.8
3.0	27.3	1472.6	1463.4	1457.4	2.7	2.6	1.6	-11.2	-13.6	-21.3
3.5	26.1	1486.2	1477.0	1471.4	2.7	2.4	1.4	-11.2	-14.0	-21.7
4.0	25.4	1499.2	1490.6	1484.8	2.7	2.3	1.3	-11.1	-14.5	-22.6
4.2	24.7	1504.6	1496.0	1490.2	2.6	2.2	1.2	-12.5	-14.5	-22.8

Phase Noise [dBc/Hz]

RF Atten 5 dB

Top -70 dBc/Hz

