

Surface Mount Voltage Controlled Oscillator



JTOS-2200P

5V Tuning for PLL IC's 2000 to 2200MHz

Features

- low phase noise
- 5V tuning voltage range
- linear tuning characteristics

Applications

- PLL circuitry
- measurement instrumentation
- frequency synthesizers

Max. Rating

Operating Temperature	-55	to 85
Storage Temperature	-55	to 100
Absolute Max. Supply Voltage(Vcc)	+7V	
Absolute Max. Tuning Voltage(Vtune)	+7V	



Case Style : BK377

Electrical Specifications

Frequency (MHz)		Power Output (dBm)	Tuning Voltage (V)		Phase Noise dBc/Hz SSB at offset Frequencies: Typ.(KHz)					Pulling pk-pk @12dB MHz	Pushing (MHz/V)	Tuning Sensitivity (MHz/V)	Harmonics dBc		3dB Modulation Bandwidth KHz	Power Supply	
Min.	Max.	Typ.	Min.	Max.	0.1	1	10	100	1000	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	V (V)	I _{max} (mA)
2000	2200	6.0	0.5	5.0	-65	-92	-112	-132		15	5.0	70.0-120.0	-15.0	-12.0	10000.0	5.0	25

V-Tune (V)	Frequency (MHz)	Tuning Sensitivity (MHz/V)	Power Output (dBm)			Harmonic Suppression (dBc)		
			-55°C	+25°C	+85°C	F2	F3	F4
0.5	1886.30	119.00	5.32	6.51	5.47	-24.80	-26.60	-40.50
1.0	1937.10	101.50	5.44	6.65	5.44	-21.70	-26.40	-39.10
1.5	1986.70	99.30	5.23	6.46	5.66	-19.70	-28.00	-42.70
2.0	2018.10	102.80	5.20	6.17	5.30	-18.60	-30.10	-41.10
2.5	2089.80	103.30	4.81	5.79	5.31	-17.60	-28.30	-40.00
3.0	2137.70	95.90	4.61	5.62	4.90	-17.10	-27.60	-39.60
3.5	2179.50	83.60	4.05	5.49	4.63	-18.20	-28.40	-39.00
4.0	2215.50	71.90	3.34	5.21	4.07	-17.80	-28.50	-40.20
4.5	2246.30	61.60	3.16	4.93	3.39	-16.90	-29.20	-42.00
5.0	2273.40	54.20	2.99	4.65	2.99	-16.70	-29.50	-42.90

V-Tune (V)	Frequency (MHz) Varies with Temperature			Pushing (MHz)	Phase Noise	
	-55°C	+25°C	+85°C	5V	Carrier Offset(Hz)	SSBPhaseNoise (dBc/Hz)
0.5	1912.80	1886.33	1868.18	2.98	1000	-65
1.0	1965.33	1937.07	1920.79	4.02	10000	-92
1.5	2015.04	1986.72	1972.22	4.90	100000	-112
2.0	2065.56	2038.11	2022.82	4.70	1000000	-132
2.5	2114.80	2089.76	2073.00	3.00		
3.0	2161.94	2137.70	2019.00	1.14		
3.5	2203.33	2179.52	2163.18	0.44		
4.0	2241.98	2215.47	2201.42	1.74		
4.5	2275.32	2246.26	2235.88	1.82		
5.0	2302.70	2276.38	2266.76	1.72		

Pin Connections

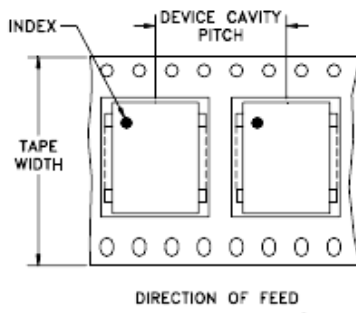
Port	Vcc	RF-Out	V-Tune	GND EXIT
jc	2	13	5	1,3,4,6,7,8,9,10,11,12,14

Outline Drawing

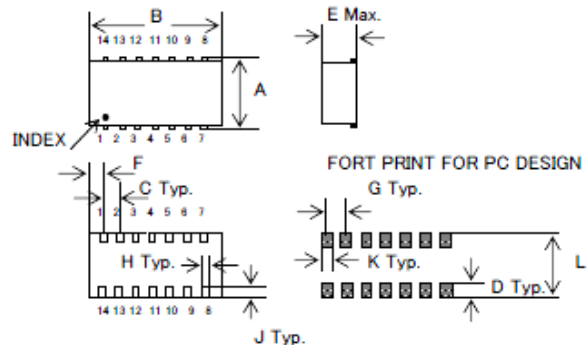
Material and Finish:

Header : Glass epoxy laminate. Cover : Cupro-nickel, bright-burnish. Lead : Solder-plated iron-nickel alloy.

Device Orientation



Tape width : 32mm
Reel size : 13inch
Device
Cavity Pitch: 20mm
Device/reel: 500pcs



A	B	C	D	E	F	G	H	J
0.505	0.789	-	0.100	0.250	0.095	0.100	0.047	0.065
12.827	20.041	-	2.540	6.350	2.413	2.540	1.194	1.651
K	L	Tolerance :						
0.065	0.525	inch	.x±.1, .xx±0.03, .xxx±.015					
1.651	13.34	mm	(inch)					