SMD Temperature Compensated Crystal Oscillators

FEATURE

Excellent phase noise performance
Frequency slope and perturbation specificationscan be customized to the application requirement
Standard temperature stability choices are±0.5ppm, ±1ppm, ±1.5ppm and ±2.5ppm over wide temperatureranges

APPLICATION

GPS
Smartphone
Communications
Consumer

2.5*2.0*0.8mm

ELECTRICAL SPECIFICATION

Parameter	2.5V~3.3V		Unit
	MIN	MAX	
Supply Voltage(VDD)3.3V*5%	3.135	4.465	V
Frequency Range	10	40	MHz
Standard Frequency	10 12.8 13 19.2 20 26 38.88 40		MHz
Frequency Stability	±1		ppm
Supply Current	2	6	mA
Control Voltage：Nominal 1.5v	0.5	2.5	V
Frequency tuning	±9	±15	ppm
Output Level (CMOS)			
Output High (Logic “1”)		2.97	Vs
Output Low (Logic “0”)	0.33		
Output Levels (VoH)		> 90%	Vs
Output Levels (VoL)	< 10%		
Duty Cycle	43	57	%
Phase Noise @ 13.0MHz			
10Hz	–95		dBc/Hz
100Hz	–115		
1KHz	–135		
10KHz	–140		
Storage Temp. Range	–40	85	°C
Storage Temp. Range	–55 125	–55 125	°C

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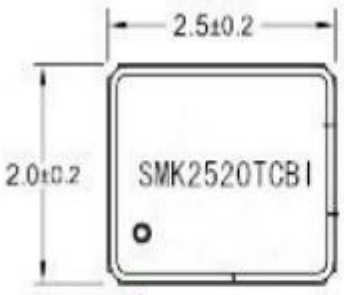
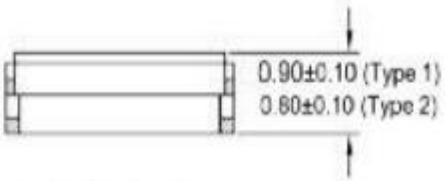
Shock	Half sine-wave acceleration of 3000g peak amplitude. Duration: 0.3ms, Velocity: 12.3ft/s [MIL-STD-202 M213] (Note 4)
Moisture resistance	1000 hours at 85°C, 85% relative humidity. Biased. [MIL-STD-202 M106g]
Thermal cycling	1000temperature cycles, where each cycle consists of a 25 minutes soak time at -40°Cfollowed by a 25 minute soak time at 85°C,with a 60 second maximum transition time between temperatures. Air to air transition.
Vibration	10g peak acceleration for 4 minutes per sweep. 4 sweeps in each of the 3 orientations. Sweptfrom 20-2000Hz [JESD22-B103-B] (Note 4)

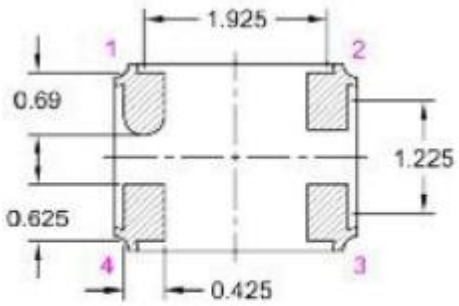
MODEL OUTLINE



TOP VIEW



FRONT VIEW



BOTTOM VIEW

PIN	
1	GND / NC
2	GND
3	OUTPUT
4	Vcc

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