



## FEATURE

The SMK7050TC encompasses Simake's new patented Pluto+ ASIC.  
 Pluto+ advances on the world famous best - in - class' Pluto ASIC technology by delivering exceptional phase noise and jitter performance and enhanced frequency versus temperature stability.

## Applications

- ▣ Time and frequency reference
- o Positioning
- o Test and Measurement
- o Telecommunications
- o Hi - Rel / Defense

## Specification for electrical appliances

Parameter	5.0V		3.3V		Unit
	MIN	MAX	MIN	MAX	
Supply Voltage(VDD) 5%	4.75	5.25	3.135	3.465	V
Standard Frequency	10, 12.8, 20, 40, 50, 80, 100, 160, 200				MHz
Frequency Tolerance*	0.1		1.0		ppm
Vs Load ( $\pm 5\%$ ) change	$\pm 0.05$		$\pm 0.05$		ppm
vs Load changes 50 Ohm ( $\pm 5\%$ )	$\pm 0.05$		$\pm 0.05$		
Short term stability @ $\tau = 1 \text{ sec}$	$\pm 1.0$		$\pm 1.0$		
Aging	$\pm 1.0$		$\pm 1.0$		
Electric current	35		35		mA
Output voltage	sine wave				
Harmonics	$\leq -30$		$\leq -30$		dBc
Spurious (10 Hz to 1 MHz )	$\leq -50$		$\leq -50$		
Output voltage level	$\geq +5.0$		$\geq +5.0$		dBm
load	50		50		$\Omega$
Frequency control range	$\geq 5.0$		$\geq 5.0$		ppm
Frequency control voltage range	0	4.5	0	4.5	V
Phase Noise					Unit
10Hz	-90				dBc/Hz
100Hz	-110				
1KHz	-125				
10KHz	-130				



## Standby Operation:

Logic '1' ( $\geq 70\%V_s$ ) to pad 1 enables oscillator output

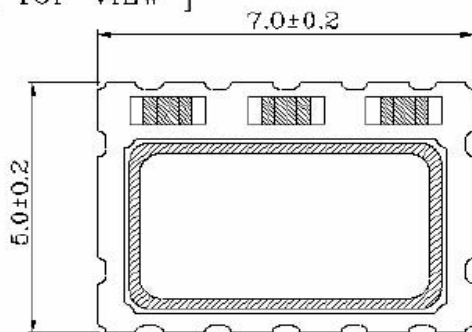
Logic '0' ( $\leq 30\%V_s$ ) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state

No connection to pad 1 enables oscillator output

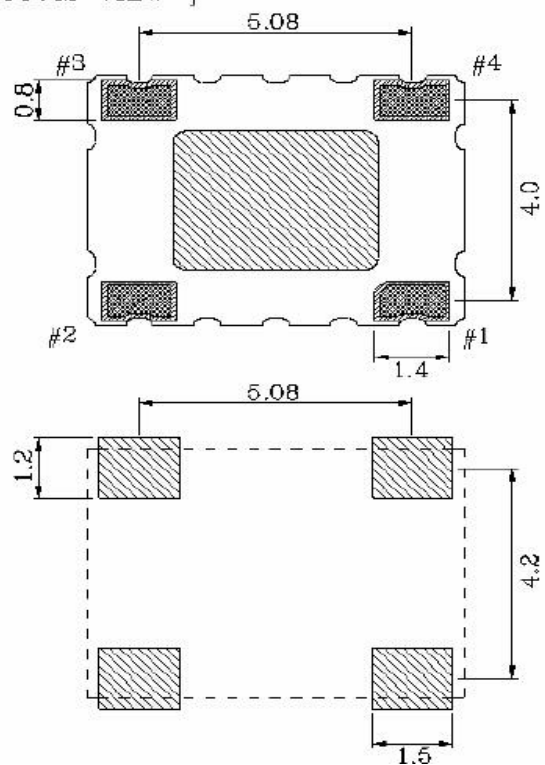
Standby Current: 10  $\mu$ A max

## Outline (mm)

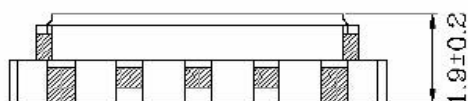
[ TOP VIEW ]



[ BOTTOM VIEW ]



[ SIDE VIEW ]



PIN	
1	Vc
2	GND
3	OUTPUT
4	Vcc