



FEATURE

The SMK7050TCAI 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.

APPLICATION

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



Specification for electrical appliances

Parameter	3.3V		Unit
	MIN	MAX	
Supply Voltage (VDD) 5%	3.135	3.465	V
Frequency Range	5	65	MHz
Standard Frequency	20.000000		
Frequency Tolerance*	1.0		ppm
Output waveform	HCMOS		
Vs Load ($\pm 5\%$) change@25°C	± 0.2		ppm
Load Variation	± 0.2		ppm
Ageing (first year)	± 1.0		ppm
Temperature Stability	± 0.5		ppm
Output Level (VOL)	0.33		V
Output Level (VOH)	2.97		V
Operating Current	6		mA
Duty Cycle @50%	45	55	%
Rise Time/ Fall Time	6		ns
Load	15		pf
Operating temperature range	-40	85	° C



20.00Mhz SMK7050TCAI ocxo ssp phase noise

Phase Noise		Unit
10Hz	-90	dBc/Hz
100Hz	-110	
1KHz	-130	
10KHz	-140	
100KHZ	-148	

Environmental Parameters

Storage Temperature Range: -55 to 105° C

Frequency stability over temperature in still air

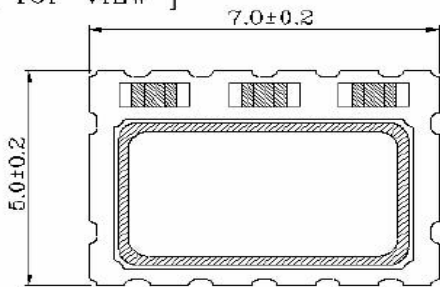
Shock: IEC 60068-2-27, Test Ea: 1500G acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes

Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz, 1.5mm displacement, 60-2000Hz at 98.1m/s², 30mins in 3 mutually perpendicular planes at 1 oct/min

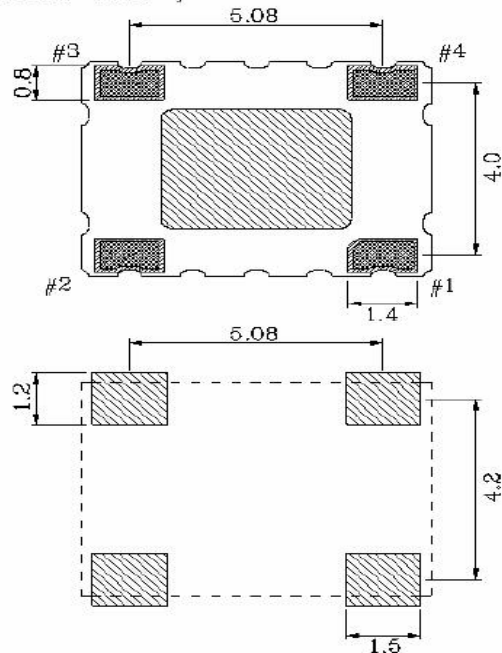
Solderability: MIL-STD-202, Method 208, Category 3

DIMENSION (mm)

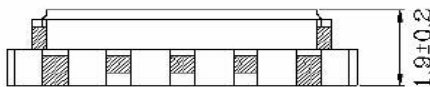
[TOP VIEW]



[BOTTOM VIEW]



[SIDE VIEW]



Pin Function	
#1	NC / GND
#2	GND
#3	Output
#4	VDD