



SMD Voltage Controlled Crystal Oscillator

High Performance VCXO in a 7 x 5 mm Surface Mount package with selectable output frequency

The SMK7050 selectable OSC combines low RMS phase jitter and low power with the ability to select the output frequency from up to four factory-configured frequencies by controlling two Frequency Select (FS) pins (e.g. 122.88 or 153.6 MHz). This enables reductions in part count and built-in upgrade paths to increase design flexibility and reduce costs

Applications

Base stations
Consumer Communications
DSL/ADSL
Ethernet
Wi-Fi
WiMAX/W-LAN

Features

Selectable output frequencies (Up to 4)
Low power differential outputs
<1ps integrated RMS phase jitter (12 kHz to 20 MHz)
Wide frequency range
CMOS, LVPECL, LVDS, or HCSL output options
Fast sample turnaround

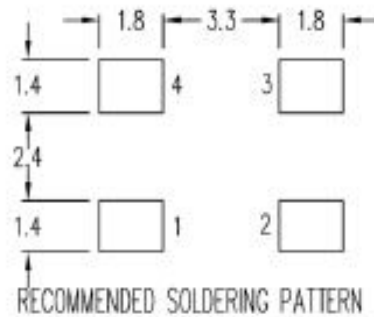
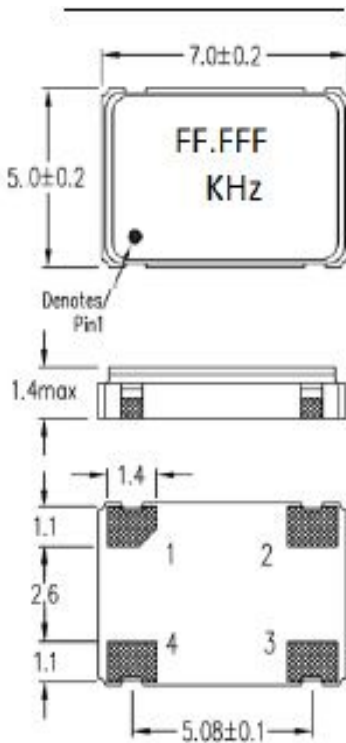
Specification for electrical appliances

Parameter	3.3V		Unit
	MIN	MAX	
Supply Voltage (VDD) 5%	1.5	5.5	V
Standard Frequency	32.768		KHz
Frequency Stability	±20 to ±50		ppm
frequency temperature coefficient	±20		ppm
Output waveform	CMOS		
Supply Current /For CMOS	1		mA
Time	200		ns
Aging/year	±3		ppm
Output voltage	V _{OH}	-0.4	V
	V _{OL}	0.4	V
Output Load	15		pf
Duty Cycle @50%	45	55	%
Storage Temperature Range	-55	125	° C
operating Temperature Range	-40	85	° C

Specifications subject to change without notice



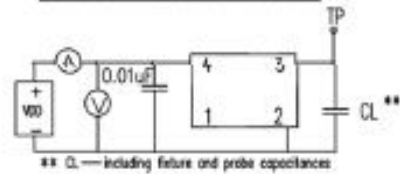
DIMENSION (mm)



- 1 Enable/disable*
- 2 GND
- 3 Output
- 4 VDD

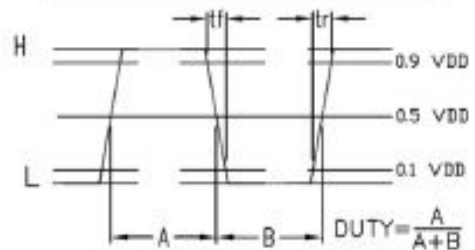
* Enable/Disable functional description when pin1 goes high($\geq 0.7V_{DD}$) or open, the oscillator in normal operation and has output in frequency. When pin1 goes low($\leq 0.3V_{DD}$), the oscillator stops and the oscillator output(pin3) becomes high impedance.

CMOS TEST CIRCUIT

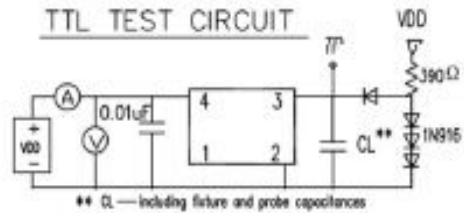


** CL — including fixture and probe capacitances

TYPICAL CMOS WAVE FORM

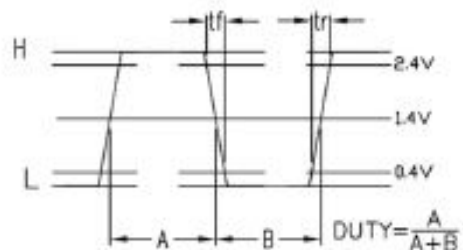


TTL TEST CIRCUIT



** CL — including fixture and probe capacitances

TYPICAL TTL WAVE FORM



MARKING SPECIFICATIONS:
FFF.FFF --- REPRESENT FREQUENCY (MHZ)