



# Crystal Oscillators

OCXO/7050 SMD/ $\pm 100$ ppb/ $-20\sim+70^{\circ}\text{C}$   
 26.000MHz/3.3V/AS026000HA

## Description

AS026000HA is Oven Controlled Voltage Controlled Crystal Oscillator(OCVCXO) of the SMD 7×5mm package. OCXO Series can be output to 6-160MHz by Operating Voltage:3.3V(Oscillation) and 3.3V(Oven Heater:0.33w)in the heater power supply. As for the frequency stability level,  $\pm 100$ ppb is  $-20\sim+70^{\circ}\text{C}$  possible.

## Feature

- 7×5×1.85mm SMD 16pin PKG
- Frequency stability: $\pm 100$ ppb/ $-20\sim+70^{\circ}\text{C}/3.3\text{V}\pm 5\%$
- Frequency short term stability:Warm up/10sec
- Phase noise: $-90\text{dBc}/10\text{Hz}, -150\text{dBc}/1\text{KHz}$ , at 10MHz
- Phase Jitter: $\leq 0.1$ psec RMS(10Hz to 10MHz)
- Excellent aging characteristics: $\pm 500$ ppb/Y/30days
- Power consumption:3mA(OSC),100mA(Heater)/3.3V
- Operating temperature :  $-20\sim+70^{\circ}\text{C}, -40\sim+85^{\circ}\text{C}$

## Applications

- Mobilephone Base station
- Measuring instrument
- Exchanger
- High-end router

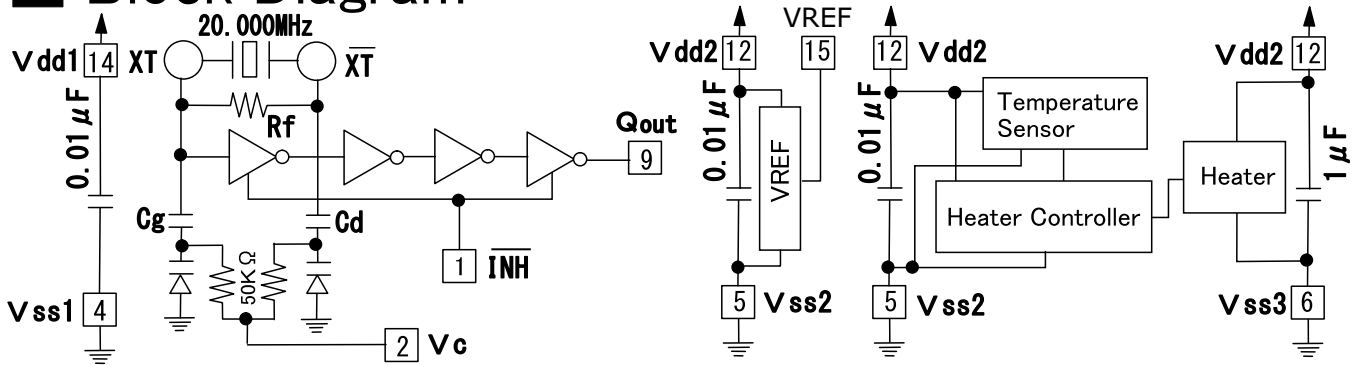
## Product Number: AS026000HA

AS	02600	O: Function Series	H: Package	A: Version
Compy Code	Frequency 26.000MHz (6~160MHz)	O: SMD OCVCXO	16Lead SMD:7×5 ×1.85mm	A: $-20\sim 70^{\circ}\text{C}$ $\pm 100$ ppb,3.3V (0.33W)

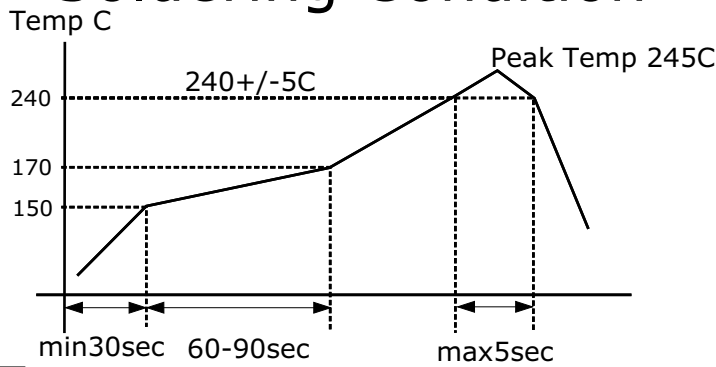
## Specifications

ITEMS	TYPE	AS026000HA
Output Frequency:		26.000000MHz
Frequency Stability		$\pm 100$ ppb: $-20$ to $+70^{\circ}\text{C}/\text{Vdd}=3.3\text{V}/\pm 5\%$
Initial frequency tolerance		$\pm 500$ ppb: $\text{Vc}=1.65\text{V}/\text{shipment}$
Initial supply voltage tolerance		$\pm 10$ ppb: $\text{Vdd}=3.3\text{V}\pm 5\%$
Initial load change tolerance		$\pm 10$ ppb: $\text{Vload}:\pm 5\%$
Initial aging tolerance/day		$\pm 5$ ppb: after 30 days of operation
Initial aging tolerance/year		$\pm 250$ ppb: after 30 days of operation
Warm-up time		10sec:to $\pm 100$ ppb/final frequency/1 hour after/ $25^{\circ}\text{C}$
Phase Noise		Typ: $-90\text{dBc}/10\text{Hz}, -120\text{dBc}/100\text{Hz}, -150\text{dBc}/1\text{KHz}$ at 10MHz
PhaseJitter		$\leq 0.1$ psec RMS(1KHz to 20MHz)
Operating Temperature Range		$-20$ to $+70^{\circ}\text{C}$
Storage Temperature Range		$-40$ to $+85^{\circ}\text{C}$
Power SupplyVoltage/Oscillation		$3.3\text{V}\pm 5\%$
Power SupplyVoltage/Oven heater		$3.3\text{V}\pm 5\%$
Power Consumption/Oscillation(No load)		Typ:3.0mA/3.3V,Max:5.0mA/3.3V
Power Consumption/Oven Heater		Typ:100mA/3.3V,Max:250mA/3.3V
Input Level		Min: $\text{V}_{\text{IH}}:+0.9\text{Vdd}$ , Max: $\text{V}_{\text{IL}}:+0.1\text{Vdd}$
Output Level/CMOS		Min: $\text{V}_{\text{OH}}:+0.9\text{Vdd}$ , Max: $\text{V}_{\text{OL}}:+0.1\text{Vdd}$
Output Load		15pF
Output Rise/Fall Time		5nsec max(0.3 to 3.0V)/5nsec max(3.0 to 0.3V)
Assembly Temperature Range		Peak Temperature $240\text{C} \pm 5\text{C}$ for 5 sec max.Maximum Temperature $245\text{C}$

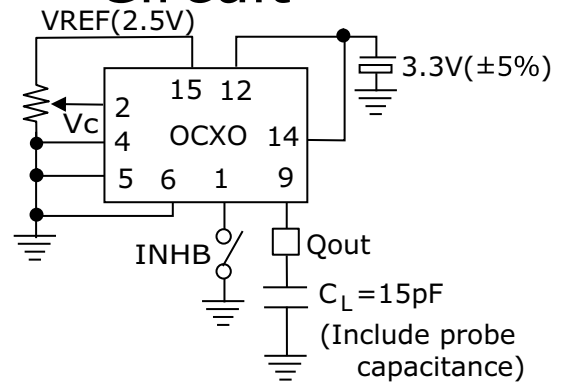
## Block Diagram



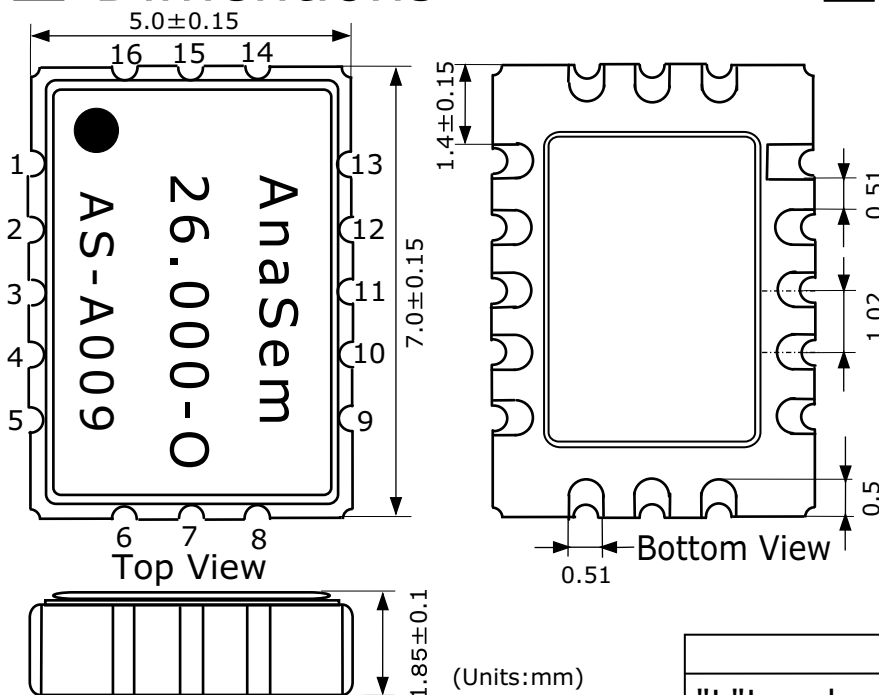
## Recommended Reflow Soldering Condition



## Measurement Circuit



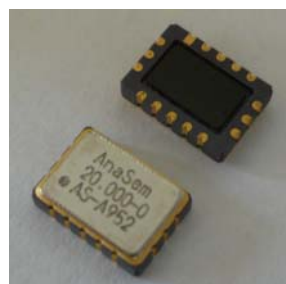
## Dimensions



## Pin Connections

1	INHB
2	Vc
3	Vcnt
4	Vss1(OSC)
5	Vss2(Tcnt)
6	Vss3(RGND)
7	NC
8	NC
9	Qout
10	NC
11	NC
12	Vdd2(Tcnt:3.3V)
13	NC
14	Vdd1(OSC:3.3V)
15	Vdd3(VREF:2.5V)
16	NC

## Package



/INHIBIT	
"L"Level	Open or "H"Level
High Impedance	Enable:Output

## AnaSem. InC

2-13-10 Maehara Nishi Funabashi Chiba Japan  
 TEL (047) 470-5810 FAX470-5825  
 Home Page: <http://www.anasem.co.jp>  
 e-mail: support@anasem.co.jp