



# Crystal Oscillators

## LVPECL/OCXO-7050 SMD/±5ppm/-20~+70°C

### 212.5MHz/3.3V/AS21250POHB

### ■ Description

AS21250POHB is LVPECL-Output Oven Controlled Crystal Oscillator(LVPECL-VC-OCXO) of the 16pin-SMD 7×5mm package. LVPECL-VC-OCXO Series can be output to 10-250MHz by Operating Voltage:3.3V(OSC) and 3.3V (Oven Heater:0.5w)in the heater power supply. As for the frequency stability level, ±1~±5ppm is -20~+70°C possible.

### ■ Feature

- 7×5×1.85mm SMD 16pin PKG
- Frequency stability:±5ppm/-20~+70°C/3.3V±5%
- Frequency short term stability:Warm up/5sec
- Phase noise:-70dBc/1Hz,-100dBc/10Hz, at 10MHz
- Phase Jitter:≤1psec RMS(10Hz to 10MHz)
- Power consumption:100mA(250MHz),50mA(Heater)/3.3V
- Operating temperature : -20~+70°C

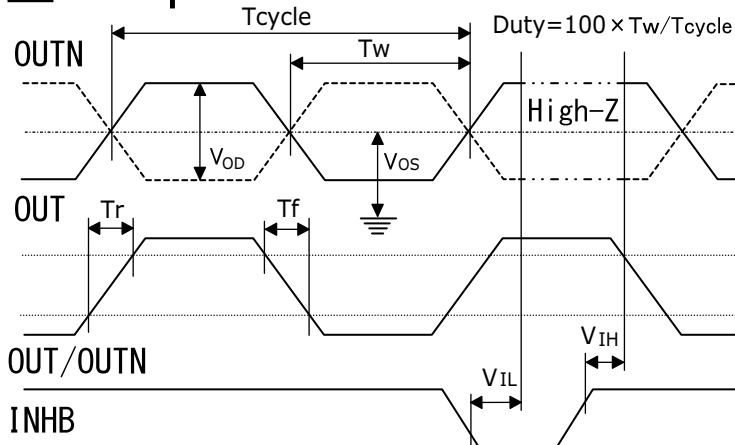
### ■ Product Number: AS21250POHB

AS	21250	PO:Function Series	H:Package	B:Version
Compny Code	Frequency 212.500MHz (10~250MHz)	PO:LVPECL- VC-OCXO	16Lead SMD:7×5 ×1.85mm	B:-20~70°C ±5ppm,3.3V (typ:0.5W)

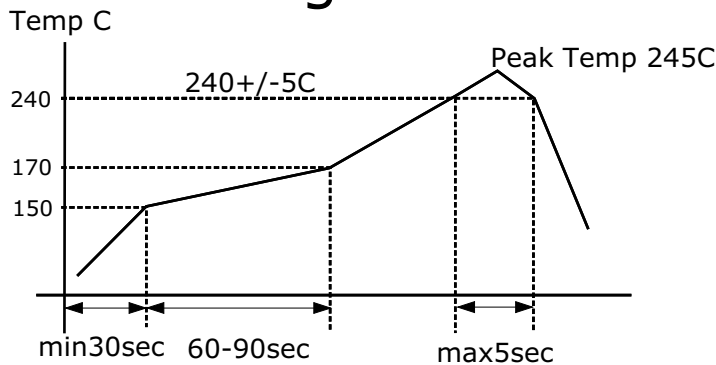
### ■ Specifications

ITEMS	TYPE	AS21250POHB
Output Frequency:		212.500000MHz
Frequency Stability		±5ppm:-20 to +70°C/Vdd=3.3V+/-5%
Output Wave Form		LVPECL
H Level Output Voltage:VOH		min:2.275V typ:2.350V max:2.420mV
L Level Output Voltage:VOL		min:1.490V typ:1.600V max:1.680mV
Warm-up time		5sec:to ±5ppm/final frequency/1 hour after/25°C
Phase Noise		Typ:-70dBc/1Hz,-100dBc/10Hz,-125dBc/100Hz at 10MHz
PhaseJitter		≤1psec RMS(10Hz to 10MHz)
Operating Temperature Range		-20 to +70°C
Storage Temperature Range		-40 to +85°C
Power SupplyVoltage/Oscillation		3.3V±5%
Power SupplyVoltage/Oven heater		3.3V±5%
Power Consumption/Oscillation(No load)		Typ:70mA/3.3V,Max:100mA/3.3V
Power Consumption/Oven Heater		Typ:70mA/3.3V,Max:100mA/3.3V
Input Level		Min:VIH :+0.9Vdd, Max:VIL :+0.1Vdd
Output Level/CMOS		Min:VOH:+0.9Vdd, Max:VOL:+0.1Vdd
Output Load		VT=VDD-2.0V:50Ω
Output Rise/Fall Time		0.8nsec max(0.3 to 3.0V)/1.0nsec max(3.0 to 0.3V)
Assembly Temperature Range		Peak Temperature 240C +/- 5C for 5 sec max.Maximum Temperature 245C

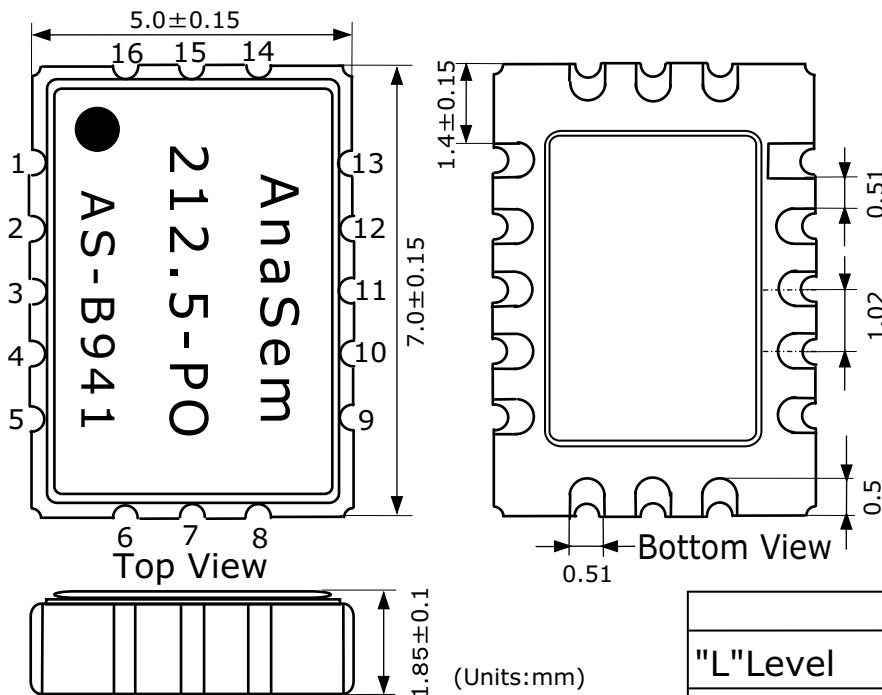
## Output Waveform



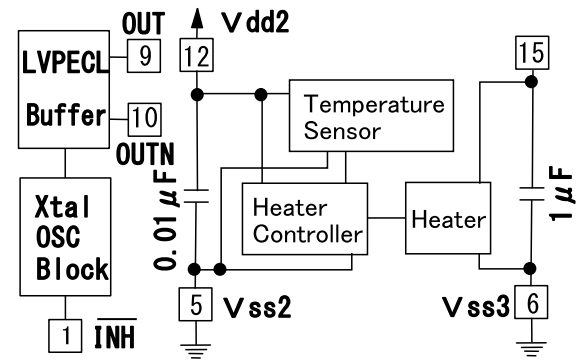
## Recommended Reflow Soldering Condition



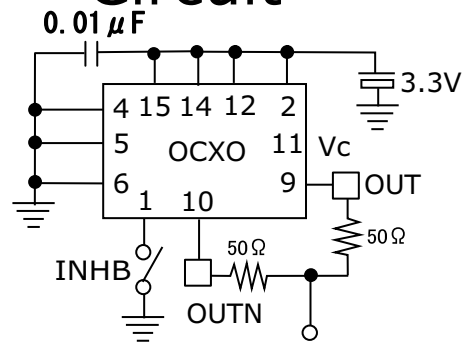
## Dimensions



## Block Diagram



## Measurement Circuit



## Pin Connections

1	INHB
2	Vdd1(LVPECL)
3	NC
4	Vss1(LVPECL/OSC)
5	Vss2(Tcnt)
6	Vss3(Heater)
7	NC
8	NC
9	OUT
10	OUTN
11	V <sub>c</sub>
12	Vdd2(Tcnt:3.3V)
13	NC
14	Vdd0(OSC:3.3V)
15	Vdd3(Heater:3.3V)
16	NC

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

AnaSem. InC

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