Crystal Oscillator

Crystal Bridge to the Future

NT5032BA / NT5032BB

High Precision Temperature Compensated Crystal Oscillator (TCXO) for STRATUM3

■ Main Application

● Stratum3 ● SONET/SDH ● Basestation

■ Features

- Maximum Operating Temp. +105°C .
  (Freq. / Temp. Characteristics Max. ±0.5×10^{-6})
- Freq. / Temp. Characteristics Max. ±0.07×10^{-6} .
  (Operating Temp. Range-10 to +70°C)
- Low current consumption : Max. 6mA
- Output specification can be selected CMOS or Clipped Sine.
- Small size SMD package : (5.0×3.2×1.8mm)
- With Enable / Disable function. (NT5032BA)


NT5032BA


NT5032BB

Pb Free

RoHS Compliant
Directive 2011/65/EU

■ Specifications

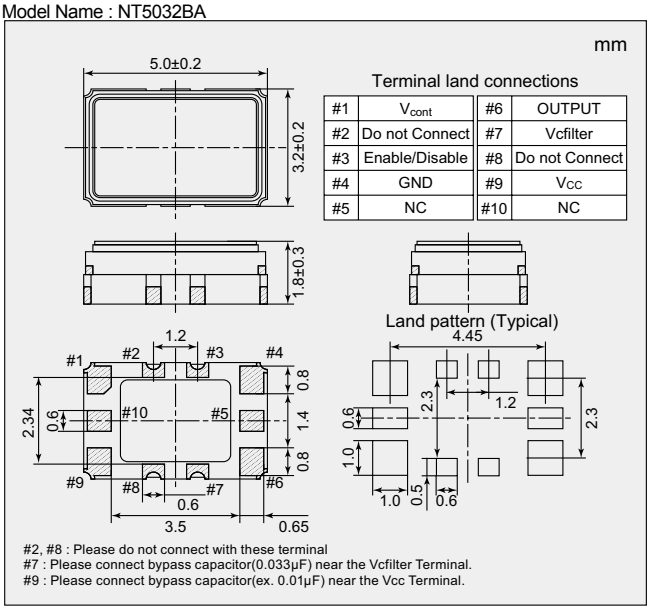
Item \ Model	NT5032BA / NT5032BB		
Nominal Frequency (MHz)	10 to 26	10 to 40	10 to 25
Supply Voltage [V_{CC}] (V)	+3.3 ± 2%	+3.3 ± 5%	+3.3 ± 5%
Current Consumption (mA)	Max. 6		
Output Specification	CMOS or Clipped sine		
Symmetry Min. to Max. (%)	40 to 60		
Output Load Condition	15pF or 10kΩ // 10 pF		
Operating Temperature Range (°C)	–10 to +70	–40 to +85	–40 to +105
Storage Temperature Range (°C)	–55 to +125		
Frequency/Temperature Characteristics	Max. ±0.07×10^{-6}	Max. ±0.28×10^{-6}	Max. ±0.5×10^{-6}
Overall Frequency Tolerance *1	Max. ±4.6×10^{-6}		
Absolute Pull Range(APR) / Control Voltage [V_{cont}]	Min. ±5×10^{-6}/+1.65V±1.65V		
Enable / Disable Function *2	Enable : Min. 70%V_{CC} or OPEN Disable : Max. 30%V_{CC}		

*1 : Overall Frequency Tolerance includes Frequency/Temperature Characteristics, Initial Frequency tolerance, Frequency/Voltage Coefficient, Frequency/Load Coefficient and Long-term Frequency Stability (15years).

*2 : NT5032BA

■ Dimensions

Model Name : NT5032BA

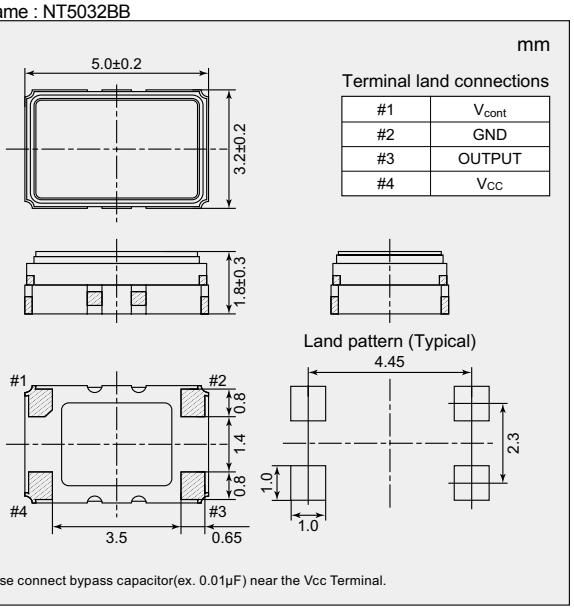


Terminal land connections

#1	V_{cont}	#6	OUTPUT
#2	Do not Connect	#7	Vcfilter
#3	Enable/Disable	#8	Do not Connect
#4	GND	#9	V_{CC}
#5	NC	#10	NC

#2, #8 : Please do not connect with these terminal
#7 : Please connect bypass capacitor(0.033μF) near the Vcfilter Terminal.
#9 : Please connect bypass capacitor(ex. 0.01μF) near the Vcc Terminal.

Model Name : NT5032BB



Terminal land connections

#1	V_{cont}
#2	GND
#3	OUTPUT
#4	V_{CC}

#4 : Please connect bypass capacitor(ex. 0.01μF) near the Vcc Terminal.

■ Specification Number

Please specify the model name, frequency, and specification number when you order products.
For further questions regarding specifications, please feel free to contact us.

Model \ Operating Temperature Range / Output Specification		-10 to +70℃	-40 to +85℃	-40 to +105℃
NT5032BA	CMOS	NSC5118B	NSC5118D	NSC5118F
	Clipped Sine	NSC5118A	NSC5118C	NSC5118E

Model \ Operating Temperature Range / Output Specification		-10 to +70℃	-40 to +85℃	-40 to +105℃
NT5032BB	CMOS	NSC5119B	NSC5119D	NSC5119F
	Clipped Sine	NSC5119A	NSC5119C	NSC5119E