

NR3225SA

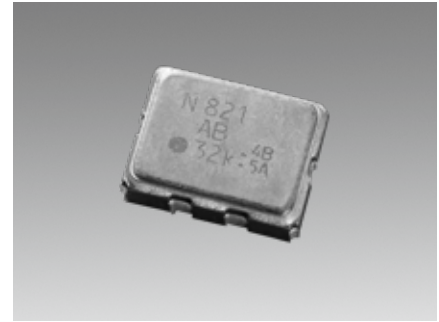
Digital Temperature Compensated RTC Modules

Main Application

High accuracy time reference

Features

- Small size SMD type : 3.2 x 2.5 x 1.0mm
- High precision frequency temperature stability : Max. $\pm 7 \times 10^{-6}$ / -40 to +105°C
- Temperature compensated voltage range : +2.0 to +5.5V
- Low current consumption
- Frequency selection function : 32.768kHz, 1024Hz, 32Hz, 1Hz
- I2C-BUS serial interface type : 400kHz high speed mode
- Various function including full calendar, alarm and timer
- Conforms to AEC-Q200



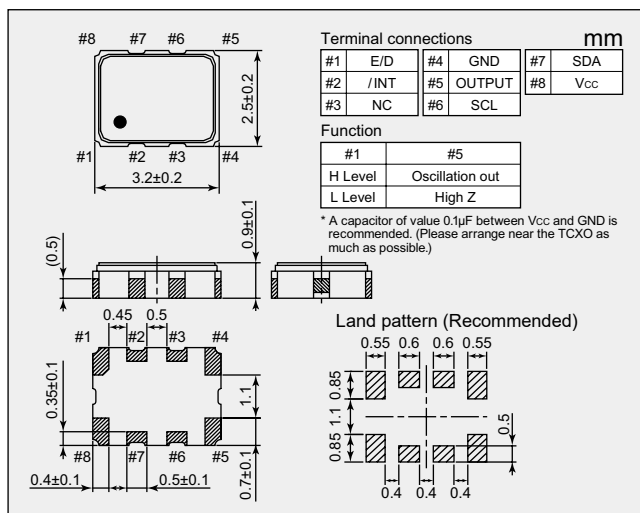
Pb Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

Specifications

Item	Model	NR3225SA
Nominal Frequency (kHz)		32.768
Temperature Compensation Supply Voltage (Characteristics guaranteed) (V)		+2.0 to +5.5
Interface Supply Voltage (V)		+1.5 to +5.5
Time Keeping Supply Voltage (V)		+1.3 to +5.5
Operating Temperature Range (°C)		-40 to +105
Storage Temperature Range (°C)		-40 to +105
Frequency / Temperature Characteristics	-40 to +105°C	Max. $\pm 7.0 \times 10^{-6}$
	-40 to +85°C	Max. $\pm 5.0 \times 10^{-6}$
	-40 to +60°C	Max. $\pm 3.8 \times 10^{-6}$
Current Consumption (µA)	SCL=SDA=/INT=V _{CC} , E/D=V _{CC} Output 32.768kHz, V _{CC} =+3V Output at no load	Max. 4.5
	SCL=SDA=/INT=V _{CC} , E/D=GND Non operating output V _{CC} =+3V	Max. 4.0
Low Voltage Detection Voltage		Min. +1.3
V _{OL} Max. / V _{OH} Min.		0.2V _{CC} / 0.8V _{CC}
Tr Max. / Tf Max. (ns)		70
Symmetry Min. to Max. (%)		40 to 60
Output Load Condition (pF)	CMOS Output	15.0
Start-up Time (sec)	Ta= -40 to +105°C	Max. 3.0
Specification Number		NSA3646A

Dimensions



Pin Function

Pin Name	I / O	Function
Enable/Disable	I	Input to control the output mode of the OUTPUT
/INT	O	Outputs for alarm signals, timer signals timer update signals and other signals
GND	-	-----
OUTPUT	O	32.768kHz signal output (CMOS output)
SCL	I	Serial clock input for I2C BUS communications
SDA	I / O	Serial data input output for I2C BUS communications
V _{CC}	-	This pin is connected to a positive power supply

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