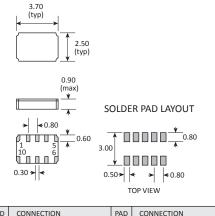
# **Real Time Clock**







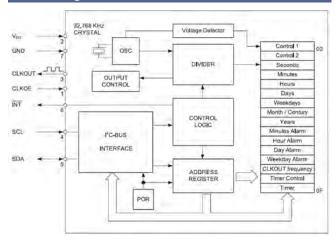


PAD	CONNECTION	PAD	CONNECTION
1	Clock output enable (CLKOE)	6	Interrupt output (INT)
2	Supply (VDD)	7	Ground (GND)
3	Clock output (CLKOUT)	8	Not connected
4	Serial clock input (SCL)	9	Not connected
5	Serial data (SDA)	10	Not connected

## Features

- AEC Q200 Rev C compliant
- Compliant with I<sup>2</sup>C-Bus interface (400kHz)
- Built in crystal for adjustment-free operation
- Programmable alarm, timer and interrupt
- Low power consumption, low ageing

#### **Block Diagram**



## **Specifications**

_	Product	Option
Parameters	RV8564C3	Codes
Frequencies (selectable): 32.768kHz, 1024Hz, 32Hz & 1Hz		
Frequency tolerance: ±10ppm ±20ppm Other		A B specify
Turnover temperature $(T_0)$ : +25°C ±5°C		
Frequency / temp coefficient: -0.035ppm/°C <sup>2</sup> ±10%		
Operating temperature range: -40 to +85°C -40 to +125°C	•	E
Storage temperature range: -55 to +125°C		
Supply voltage (V <sub>DD</sub> ): I <sup>2</sup> C bus active 1.8 ~ 5.5V Time-keeping mode 1.2 ~ 5.5V	:	
Supply current (during access): 200μA max (fscl=100kHz) 800μA max (fscl=400kHz)	:	
Supply current (time-keeping): 250/500nA typ/max (fscl=0Hz, V <sub>DD</sub> =3V) 225/450nA typ/max (fscl=0Hz, V <sub>DD</sub> =2V)	:	
Ageing: ±3ppm max first year		
Shock and vibration resistance: ±5ppm, 5,000g, 0.3ms, ½ sine ±5ppm, 20g, 10.0 ~ 2,000Hz	:	
Soldering condition: Reflow, 260°C, 20 sec max		

Standard. Dotional - Please specify required code(s) when ordering

## **Ordering Information**

Product + option code

eg: RV8564C3/B ±20ppm

Option code X (eg RV8564C3/X) denotes a custom spec.

- Available on T&R 1k or 3k pcs per reel
- Evaluation / development board & manual available on request
- The I<sup>2</sup>C-Bus is a trademark of Philips Electronics NV

#### Description

This sub-miniature SMD ceramic package has been specially designed to combine the 32.768kHz crystal unit with a CMOS based oscillator and real-time clock circuit.

The calendar function tracks year, month, date and day of the week with built-in century and leap-year flags. The clock function tracks minutes and seconds in 24-hour format. Programmable alarm setting and universal timer functions increase flexibility.



Manufactured by Micro Crystal
Stocked & distributed by Golledge

