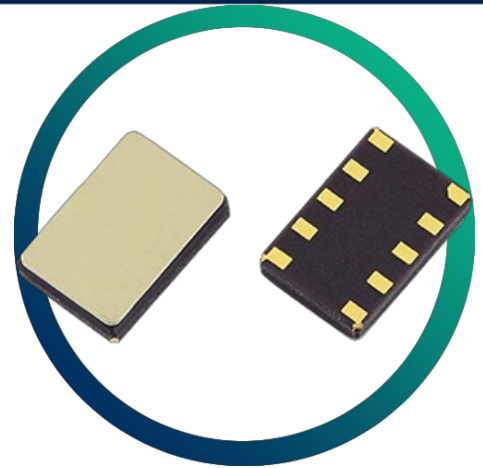


# RV-3049-C3

## RTC SPI Bus

- Temperature compensated accuracy
- AEC-Q200 compliant option
- Compliant with 4-wire SPI bus
- Backup battery input (internal switchover)
- Previously named RV3049C3



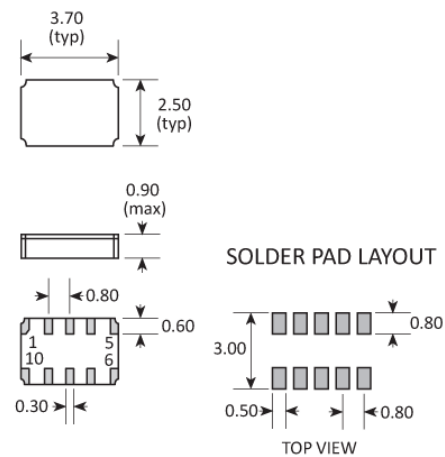
### CONFIGURABLE OPTIONS

Parameter	Option Code
<b>Time accuracy</b>	
Any	
±3ppm max (0.26s/day) @ 25°C	
±6ppm max (0.52s/day), -40+85°C	A
±25ppm max (2.17s/day), -40+85°C	B
±8ppm max (0.70s/day), -40+125°C	D
±30ppm max (2.60s/day), -40+125°C	E
<b>Operating temperature range</b>	
Any	
-40 to +85°C	
-40 to +125°C	
<b>Qualification</b>	
Any	
Commercial	
AEC-Q200 (Automotive)	A

## SPECIFICATIONS

Frequencies (selectable)	32.768kHz, 1024Hz, 32Hz & 1Hz
Dimensions	3.7 x 2.5 x 0.9mm
Frequency tolerance @ 25°C	±10ppm typ, ±20ppm max
Storage temperature range	-55 to +125°C
Supply voltage (V <sub>DD</sub> )	SPI bus active 1.8 ~ 5.5V Time-keeping mode 1.3 ~ 5.5V
Supply current (V <sub>DD</sub> =3.0V)	0.80µA typ, 1.0µA max
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

## PACKAGE DRAWING



PAD	CONNECTION	PAD	CONNECTION
1	Clock output enable (CLKOE)	6	Ground (VSS)
2	Supply (VDD)	7	Interrupt output (INT)
3	Clock output (CLKOUT)	8	Chip select (CS)
4	Serial clock input (SCL)	9	Backup supply voltage
5	Serial data output (SDO)	10	Serial data input (SDI)

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the RV-3049-C3 please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## TECHNICAL RESOURCES

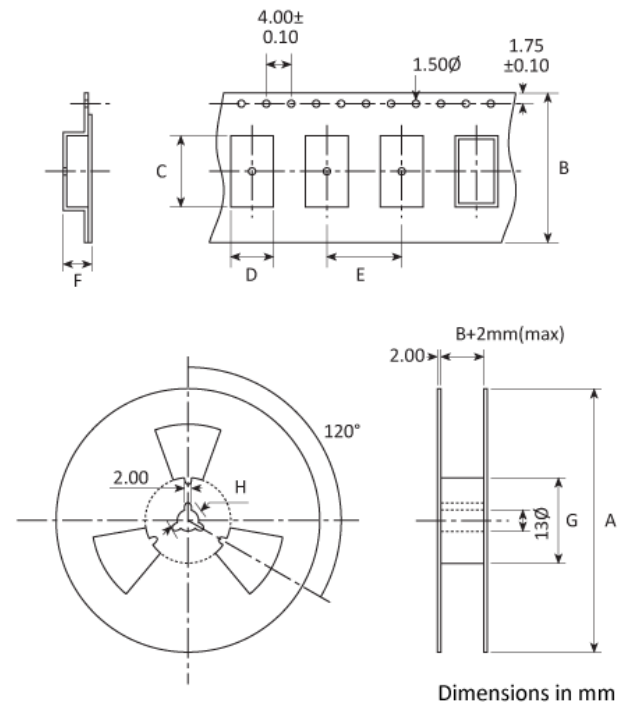
[RV-3049\\_App-Manual.pdf](#)

## APPLICATIONS

The RV-3049-C3 real time clock is a versatile component suitable for a wide range of applications and uses including:

Automotive including car radio, GPS and other tracking systems, dashboard devices, tachometers, entertainment systems, and engine control  
Industrial and consumer electronics  
Metering including E-meter and heating counters  
Outdoor including ATM and POS systems, surveillance and safety systems, and ticketing systems  
Portable devices  
White goods

## TAPE & REEL SPECIFICATION



A:178 / B:12 / C:4 / D:2.7 / E:4 / F:1 / G:80 / H:21

## HANDLING & STORAGE



Human Body Model (HBM) 1A (250V to <500V)



Moisture Sensitivity Level (MSL): 1 (or not applicable)

## CONSTRUCTION

Ceramic package

## COMPLIANCE



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions. [See our](#)

[declaration](#)



REACH compliant. [See our statement](#)



Free of conflict minerals. [See our declaration](#)



Free of Halogens. [See our declaration](#)



Free of Ozone-depleting substances. [See our](#)

[declaration](#)

## SUPPLY PARTNER



The RV-3049-C3 is manufactured by Micro Crystal and stocked and supplied by Golledge.

## OTHER INFORMATION

An evaluation/development board for the RV-3049-C3 is also available on request. Please contact our expert advisers at [sales@golledge.com](mailto:sales@golledge.com) for more information.

## BLOCK DIAGRAM

