

RV-3029-C2

RTC I²C Bus

- Temperature compensated accuracy
- AEC-Q200 compliant option
- Compliant with I²C-Bus interface (400kHz)
- Backup battery input, alarm, timer and interrupt
- Previously named RV3029C2



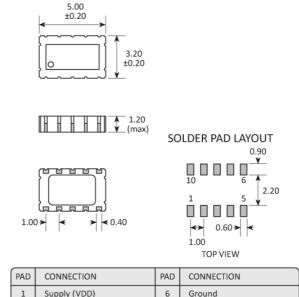
| CONFIGURABLE OPTIONS | |
|----------------------------------|-------------|
| Parameter | Option Code |
| Time accuracy | |
| Any | |
| ±3ppm max (0.26s/day) @ 25°C | |
| ±6ppm max (0.52s/day), -40+85°C | А |
| ±25ppm max (2.17s/day), -40+85°C | В |
| ±8ppm max (0.70s/day), -40+125°C | D |
| Operating temperature range | |
| Any | |
| -40 to +85°C | |
| -40 to +125°C | |
| Qualification | |
| Any | |
| Commercial | |
| AEC-Q200 (Automotive) | А |



SPECIFICATIONS

| Frequencies (selectable) | 32.768kHz, 1024Hz, 32Hz, 1Hz |
|--|--|
| Dimensions | 5.0 x 3.2 x 1.2mm |
| Frequency tolerance @ 25°C | ±10ppm typ, ±20ppm max |
| Storage temperature range | -55 to +125°C |
| Supply voltage (V _{DD}) | I ² C bus active 1.8 ~ 5.5V Time-keeping mode 1.3 ~ 5.5V |
| Supply current (V _{DD} =3.0V) | 0.80μA typ, 1.0μA max |
| (000-3.00) | |
| Shock and vibration resistance | ±5ppm, 5,000g, 0.3ms, ½ sine ±5ppm, 20g, 10.0 ~ 2,000Hz |

PACKAGE DRAWING



| PAD | CONNECTION | PAD | CONNECTION |
|-----|---------------------------|-----|---------------------------|
| 1 | Supply (VDD) | 6 | Ground |
| 2 | Frequency output (CLKOUT) | 7 | Interrupt output (/INT) |
| 3 | Not connected | 8 | Backup supply |
| 4 | Serial clock input (SCL) | 9 | Not connected |
| 5 | Data (SDA) | 10 | CLK output enable (CLKOE) |

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the RV-3029-C2 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.

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-3029-Cx_App-Manual.pdf RV-3029-C2_Development-Board.pdf

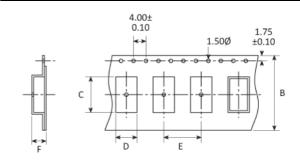


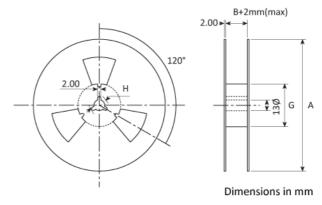
APPLICATIONS

The RV-3029-C2 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:5.3 D:3.5 E:8 F:1.4 G:80 H:21
*Larger reel size available. Please ask for details

HANDLING & STORAGE



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



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

CONSTRUCTION

SON 10-pin ceramic package with glass lid



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

<u>declaration</u>

SUPPLY PARTNER



The RV-3029-C2 is manufactured by Micro Crystal and stocked and supplied by Golledge.

OTHER INFORMATION

An evaluation/development board for the RV-3029-C2 is also available on request. Please contact our expert advisers at sales@golledge.com for more information.

BLOCK DIAGRAM

