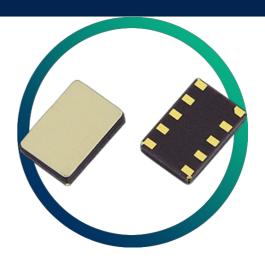
# RV-3029-C3

# RTC I<sup>2</sup>C bus

- Temperature compensated accuracy
- AEC-Q200 compliant option
- Compliant with I2C-Bus interface (400kHz)
- Backup battery input (internal switchover)
- Previously named RV3029C3

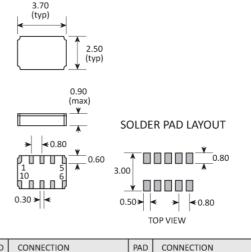


CONFIGURABLE OPTIONS	
Parameter	Option Code
Frequencies (selectable)	
32.768kHz, 1024Hz, 32Hz, 1Hz	
Time accuracy	
Any	
±3ppm max (0.26s/day) @ 25°C	
±6ppm max (0.52s/day), -40+85°C	А
±25ppm max (2.17s/day), -40+85°C	В
±8ppm max (0.70s/day), -40+125°C	D
±30ppm max (2.60s/day), -40+125°C	E
Operating temperature 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	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> )	I <sup>2</sup> C bus active 1.8 ~ 5.5V
	Time-keeping mode 1.3 ~ 5.5V
Supply current (V <sub>DD</sub> =3.0V)	0.80µА typ, 1.0µА max
Shock and vibration	±5ppm, 5,000g, 0.3ms, ½ sine
resistance	±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	Not connected
4	Serial clock input (SCL)	9	Backup supply voltage
5	Serial data (SDA)	10	Not connected

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the RV-3029-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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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

## **APPLICATIONS**

The RV-3029-C3 real time clock is a versatile component suitable for a wide range of applications and uses including:

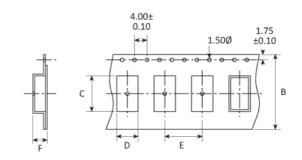
Automotive including car radio, GPS and other tracking systems, dashboard devices, tachometers, entertainment systems, and engine control Industrial and consumer electronics

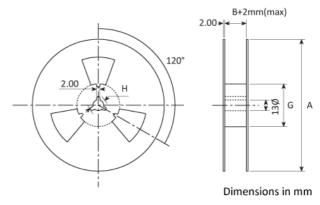
Metering including E-meter and heating counters

Portable devices

White goods

### **TAPE & REEL SPECIFICATION**





A:178\* / B:12 / C:4 / D:2.7 / E:4 / F:1 / 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**

Ceramic package

# TECHP@INT Golledge

#### COMPLIANCE

# **P6**)

Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions. <u>See our</u>

declaration



REACH compliant. <u>See our statement</u>



Free of conflict minerals. See our declaration



Free of Halogens. <u>See our declaration</u>



Free of Ozone-depleting substances. <u>See our</u>

declaration

### **SUPPLY PARTNER**



The RV-3029-C3 is manufactured by Micro Crystal and stocked and supplied by Golledge.

# **OTHER INFORMATION**

An evaluation/development board for the RV-3029-C3 is also available on request. Please contact our expert advisers at <a href="mailto:sales@golledge.com">sales@golledge.com</a> for more information.

# **BLOCK DIAGRAM**

