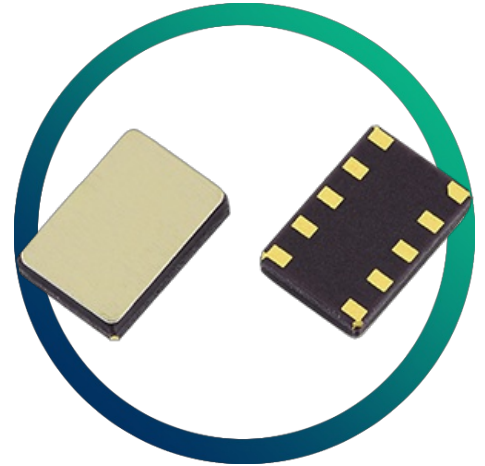# RV-8564-C3

RTC I²C bus

- AEC-Q200 compliant option
- Compliant with I²C-Bus interface (400kHz)
- Built in crystal for adjustment-free operation
- Programmable alarm, timer and interrupt functions
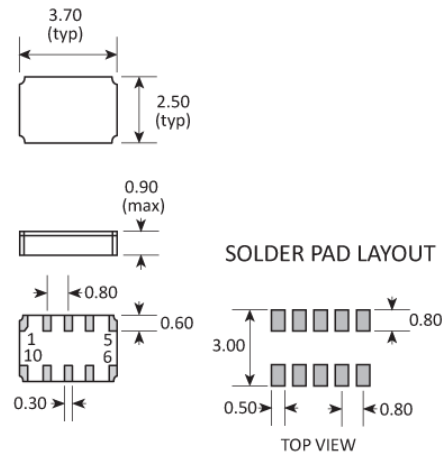- Previously named RV8564C3

CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency tolerance	
Any	
±10ppm	A
±20ppm	B
Qualification	
Any	
Commercial	
AEC-Q200 (Automotive)	A

v1.2

SPECIFICATIONS

Frequencies (selectable)	32.768kHz, 1024Hz, 32Hz, 1Hz
Dimensions	3.7 x 2.5 x 0.9mm
Turnover temperature (T_0)	+25°C ±5°C
Frequency / temp coefficient	−0.035ppm/°C^2 ±10%
Operating temperature range	−40 to +85°C
Storage temperature range	−55 to +125°C
Supply voltage (V_{DD})	I^{2}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_{DD}=3V) 225/450nA typ/max (fscl=0Hz, V_{DD}=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

PACKAGE DRAWING

PAD	CONNECTION	PAD	CONNECTION
1	Clock output enable (CLKOE)	6	Interrupt output ($\overline{INT}$)
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

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the RV-8564-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.

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.

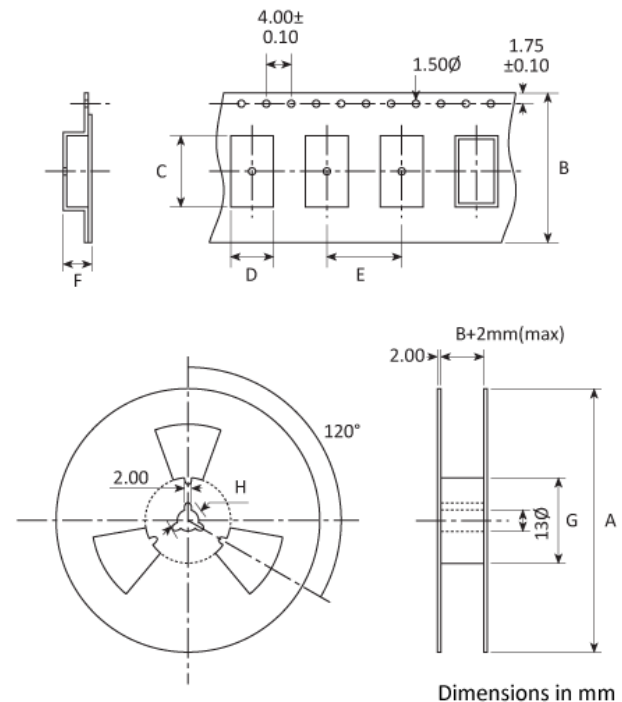## TECHNICAL RESOURCES

RV-8564-Cx_App-Manual.pdf

APPLICATIONS

The RV-8564-C3 real time clock is a versatile component suitable for a wide range of applications and uses including:

Automotive
Health Care
IoT
Industrial
Metering
Portable Devices
Wearables

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

Golledge Electronics Ltd
W: www.golledge.com | E: sales@golledge.com | T: +44 1460 256 100
ISO 9001:2015 & ISO 14001:2015 Certified

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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

MICRO CRYSTAL SWITZERLAND

The RV-8564-C3 is manufactured by Micro Crystal and stocked and supplied by Golledge.

OTHER INFORMATION

An evaluation/development board for the RV-8564-C3 is also available on request. Please contact our expert advisers at sales@golledge.com for more information.

BLOCK DIAGRAM

Golledge Electronics Ltd
W: www.golledge.com | E: sales@golledge.com | T: +44 1460 256 100
ISO 9001:2015 & ISO 14001:2015 Certified

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