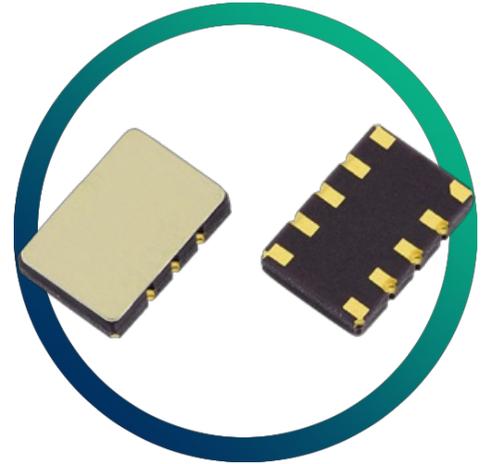


RV-1805-C3

RTC I²C Bus Low Power

- Extremely low current consumption
- Trickle charger, power management & switchover
- Backup battery input
- AEC-Q200 compliant option
- Previously named RV1805C3



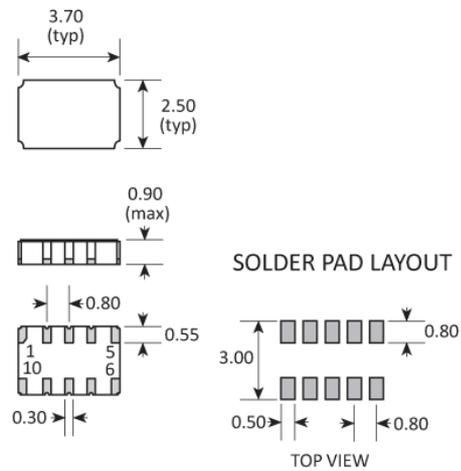
CONFIGURABLE OPTIONS

Parameter	Option Code
Qualification	
Any	
Commercial	
AEC-Q200 (Automotive)	A

SPECIFICATIONS

Frequencies (programmable)	32.768kHz ~ 1/60Hz
Dimensions	3.7 x 2.5 x 0.9mm
Frequency tolerance @ 25°C	±100ppm typ
Time accuracy	±2ppm typ (0.17s/day) @ 25°C
Operating temperature range	-40 to +85°C
Storage temperature range	-55 to +125°C
Frequency / temp coefficient	-0.035ppm/°C ² ±10%
Supply voltage (V _{DD})	I ² C bus active 1.6 ~ 3.6V Time-keeping mode 1.5 ~ 3.6V
Supply current (I ² C, f _{scl} =400kHz)	6µA typ (V _{DD} =3.0V,) 1.5µA typ (V _{DD} =1.7V)
Supply current (time-keeping V _{DD} =3V)	60nA typ, 80nA max (32kHz XTL) 17nA typ, 25nA max (RC MODE) 22nA typ, 32nA max (RC AUTOCAL)
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	Supply (VDD)	6	Ground (VSS)
2	Capacitor RC-oscillator	7	Backup supply voltage
3	Clock/Interrupt (CLK/INT)	8	Power switch output (PSW)
4	Serial clock input (SCL)	9	Watchdog input (WDI)
5	Serial data (SDA)	10	Reset output (RST)

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the RV-1805-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

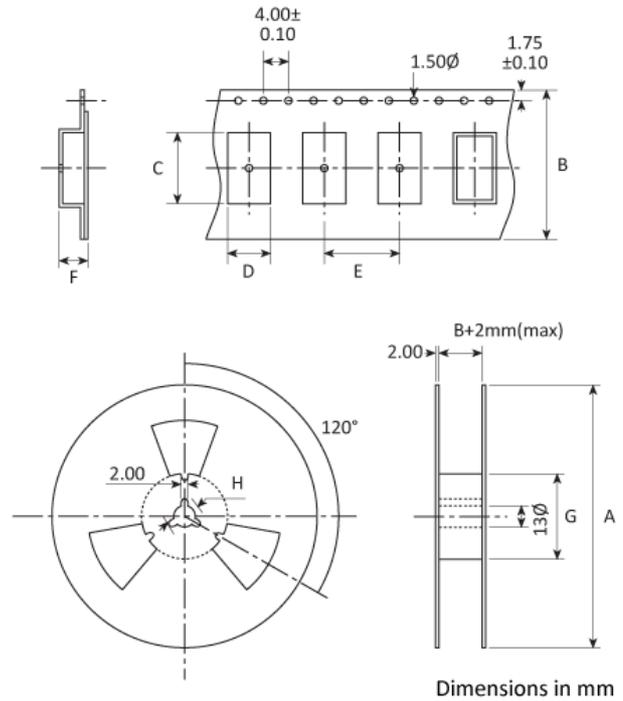
RV-1805-C3_App-Manual.pdf

APPLICATIONS

The RV-1805-C3 real time clock is a versatile component suitable for a wide range of applications and uses including:

- 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

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-1805-C3 is manufactured by Micro Crystal and stocked and supplied by Golledge.

OTHER INFORMATION

An evaluation/development board for the RV-1805-C3 is also available on request. Please contact our expert advisers at sales@golledge.com for more information.

BLOCK DIAGRAM

