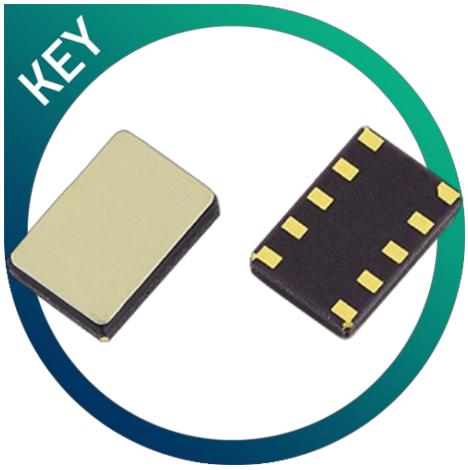
RV1805C3

RTC I²C Bus Low Power



- Extremely low current consumption
- Miniature package with integrated crystal
- Trickle charger, power management & switchover
- Backup battery input
- AEC-Q200 compliant option

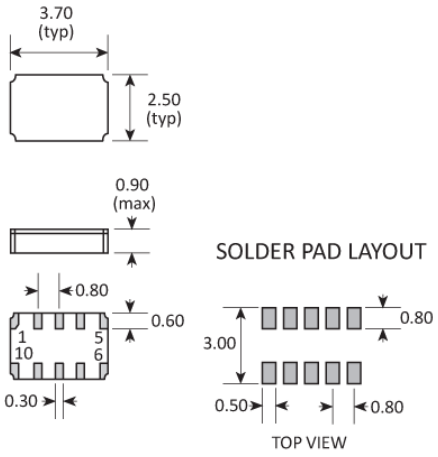
CONFIGURABLE OPTIONS

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, fscl=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/$\overline{INT}$)	8	Power switch output (PSW)
4	Serial clock input (SCL)	9	Watchdog input (WDI)
5	Serial data (SDA)	10	Reset output ($\overline{RST}$)

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the RV1805C3 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.

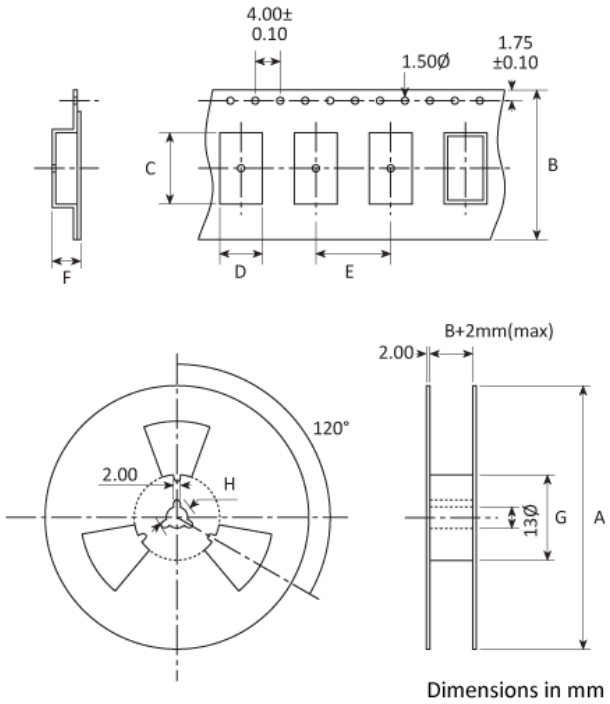
Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

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

TAPE & REEL SPECIFICATION



Dimensions in mm

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

MATERIAL COMPOSITION

Lead-free (< 0.1% by weight)

RoHS 2 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

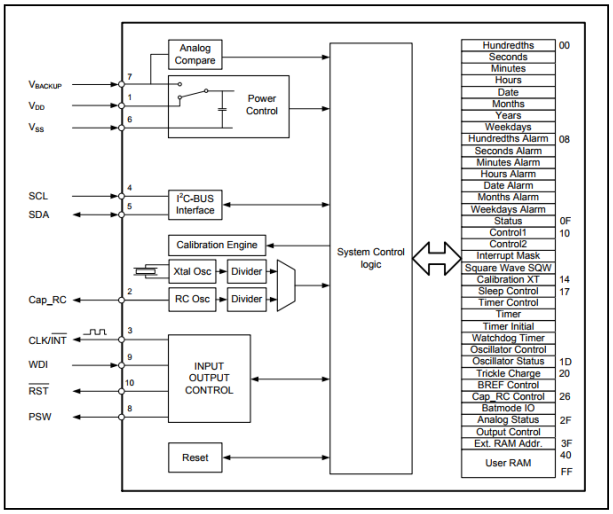
SUPPLY PARTNER

The RV1805C3 is manufactured by Micro Crystal and stocked and supplied by Golledge.

OTHER INFORMATION

An evaluation/development board for the RV1805C3 is also available on request. Please contact our expert advisers at sales@golledge.com for more information.

BLOCK DIAGRAM



OTHER INFORMATION

About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

Come and visit

Eaglewood Park, ILMINSTER,
Somerset,TA19 9DQ, England

Give us a call

Tel: +44 1460 256 100
Fax: +44 1460 256 101

Email us

sales@golledge.com

Our Worldwide Distributors

Belgium & Luxembourg

Alcom Electronics NV/SA

Email info@alcom.be
Web www.alcom.be
Tel +32 (0)3 458.30.33

China, Hong Kong - 中国 / 香港

Meiya China

Email sales@meiyatech.com
Web www.meiyatech.com
Tel +86 755 2823 1923

France

Equipments Scientifique

Email comp@es-france.com
Web www.es-france.com
Tel +33 1 47 95 99 89

Germany

MEV Elektronik Service GmbH

Email info@mev-elektronik.com
Web www.mev-elektronik.com
Tel +49 54 24 23 40-0

India

V5 Semiconductors

Email sales@v5semiconductors.com
Web v5semiconductors.com
Tel +91-80-2661 0621

Israel

Phoenix Technologies Ltd

Email sales@phnx.co.il
Web www.phnx.co.il
Tel +972 9 764 4800

Netherlands

Alcom Electronics BV

Email info@alcom.nl
Web alcom.nl
Tel +31 (0)10 288.25.00

Norway

Link Nordic

Email bjorn.nyjordet@linknordic.com
Web linknordic.com
Tel +47 93 22 68 90

Russia - Россия

EFO Ltd

Email elena@efo.ru
Web www.golledge.ru
Tel +7(812)327-8654

Spain & Portugal

R.C. Microelectronica, S.A.

Email ventas@rcmicro.es
Web www.rcmicro.es
Tel +34 93 260 21 66

Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).
To take advantage of our highly praised service get in touch with us today.