



**THE DATASHEET OF
RV-8803-C7-32.768KHZ-3PPM-TA-QA**

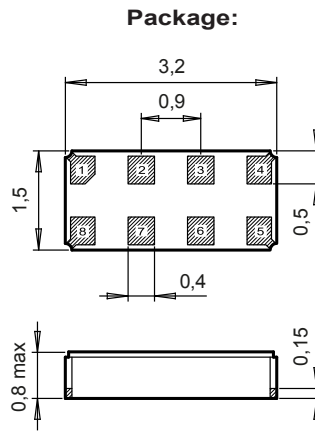


RV-8803-C7

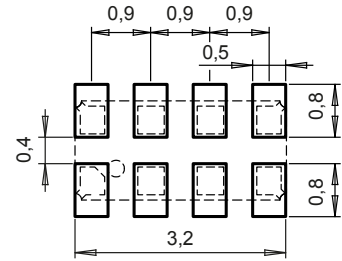
Real-Time Clock Module with I²C-Bus



DIMENSIONS



Recommended Solder Pad:



Metal lid is connected to V_{SS} (pin #5)

All dimensions in mm typical

APPLICATIONS

IoT
Metering
Industrial
Automotive
Health Care
Wearables, Portables

DESCRIPTION

The RV-8803-C7 is a SMT Real-Time Clock Module that incorporates an integrated CMOS circuit together with an XTAL. It operates under vacuum in a hermetically sealed ceramic package with metal lid.

FEATURES

Low power consumption: 240 nA @ 3 V.
Wide operating voltage range: 1.5 V to 5.5 V.
Time accuracy, temperature compensated: -40°C to +85°C, ±3 ppm.
+85°C to +105°C, ±7 ppm.

User programmable offset value.

Provides year, month, date, weekday, hours, minutes, seconds and 100th seconds.

Automatic leap year correction: 2000 to 2099.

Timer, alarm and external event input with time stamp.

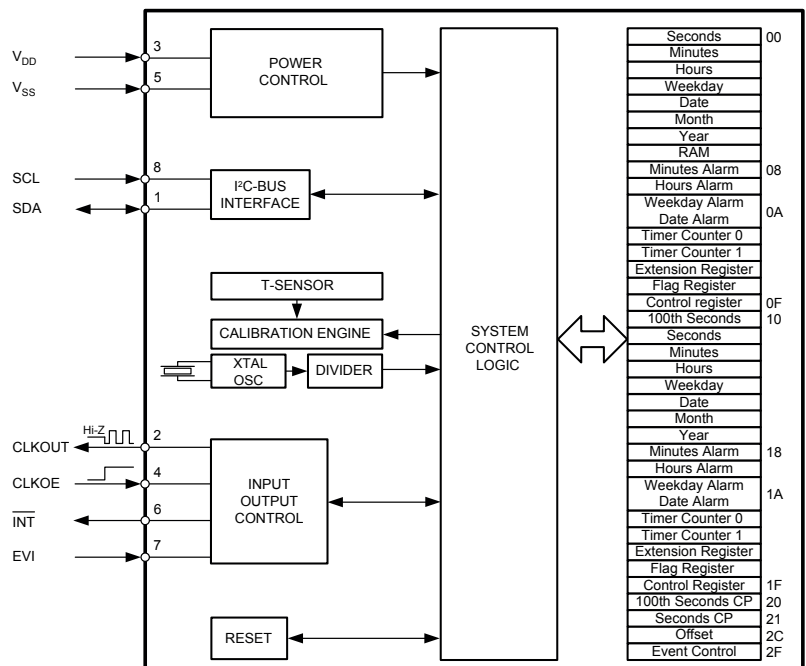
Clock output frequencies: 32.768 kHz, 1024 Hz, 1 Hz.

I²C-bus interface: 400 kHz.

100% Pb-free, RoHS-compliant.

Automotive qualification according to AEC-Q200 available.

BLOCK DIAGRAM



ELECTRICAL CHARACTERISTICS AT 25°C

More detailed information can be found in the Application Manual.

	Symbol	Condition	Min.	Typ.	Max	Unit
Supply voltage	V _{DD}	Temp. comp.	1.5		5.5	V
Current consumption Time keeping mode	I _{DDO}	I ² C-bus inactive, V _{DD} = 3 V		240	350	nA
Time accuracy	ΔF/F	-40 to +85°C	±3			ppm
		+85 to +105°C	±7			
Aging first year max.	ΔF/F	@ 25°C	±3			ppm

ENVIRONMENTAL CHARACTERISTICS

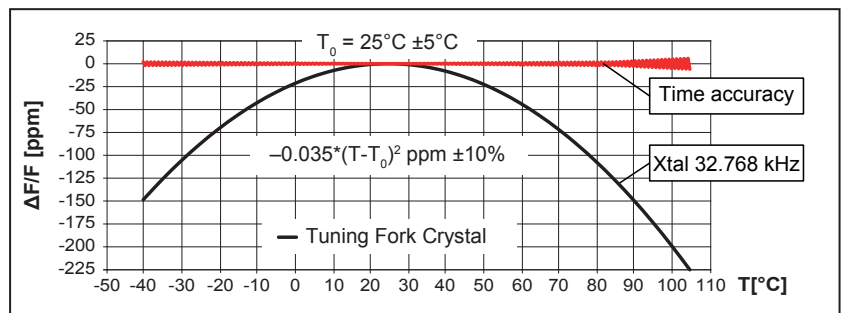
		Conditions	Max. Dev.
Storage temperature range		-55 to +125°C	
TA Operating temperature range		-40 to +85°C ¹⁾	
Shock resistance	ΔF/F	5000 g, 0.3 ms, ½ sine	±5 ppm
Vibration resistance	ΔF/F	20 g / 10–2000 Hz	±5 ppm

1) Supports extended range from +85°C to +105°C with limitations.

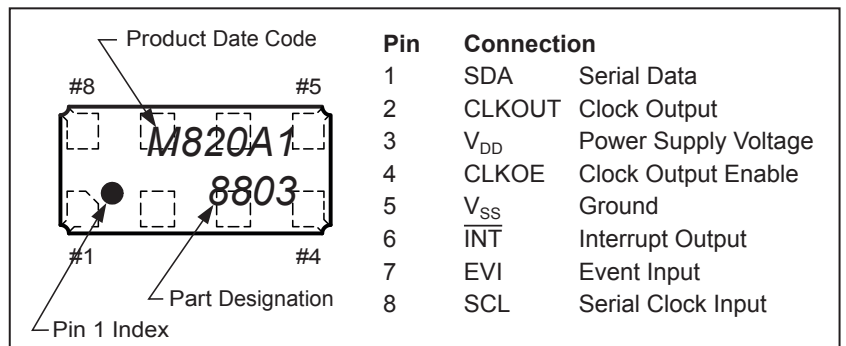
TERMINATIONS AND PROCESSING

Package	Termination	Processing
SON-8	Au flashed pads	IPC/JEDEC J-STD-020C 260°C / 20 - 40 s

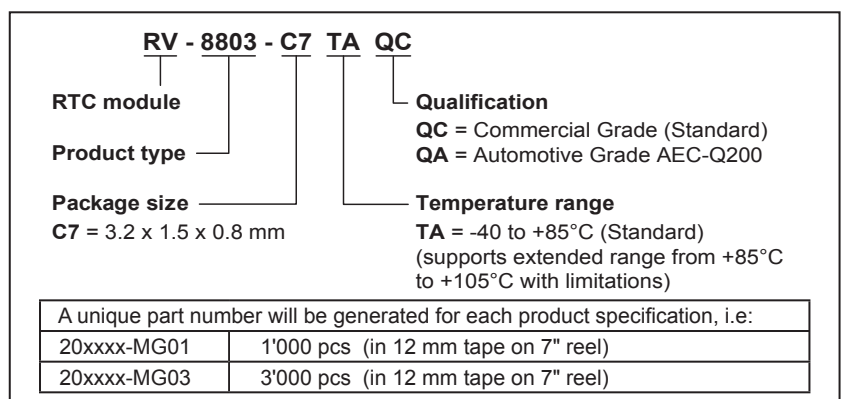
FREQUENCY TEMPERATURE CHARACTERISTICS



PIN CONNECTIONS TOP VIEW



ORDERING INFORMATION



All specifications subject to change without notice.



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Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View RV-8803-C7-32.768KHZ-3PPM-TA-QA on WIN SOURCE](#)
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- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management