

ECS-RTC-3225-5699C3

Low Power Consumption I²C RTC

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

The ECS-RTC-3225-5699C3 Real Time Clock Module (I²C-Bus) with built in 32.768 kHz TCXO. It supports calendar (year, month, day, hour, minute, second), clock, temp sensor, VBAT and timer functions.

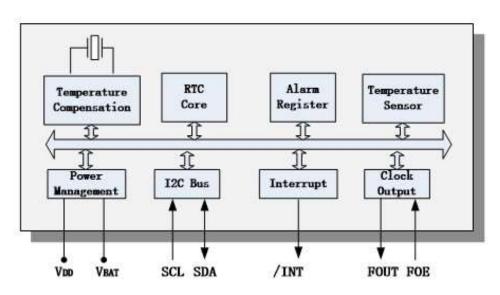


ECS-RTC-5699C3

- Built in 32.768 khz TCXO
- Backup battery switchover function
- Extended temp range
- ±3 ppm Stability -40 ~ +85°C
- Built in temperature sensor

PARAMETERS	CONDITIONS	ECS-RTC-3225-5699C3		UNITS	
		MIN	ТҮР	MAX	
Power Supply Voltage	Normal mode	2.5	3.0	5.0	V
Power Supply Voltage	VDD=VBAT (Note 1)	1.6	3.0	5.0	V
Backup Battery	VBAT	1.6	3.0	5.0	V
Current Consumption IDD	Battery Supply		1.0		μΑ
Stability	-40 ~ +85°C			±3	ppm
Oscillation start time	@ +25°C			1	S
Aging	Per Year			±3	ppm
Temp. Sensor Accuracy	T _{emp VDD=3.0V}			±5	°C
Duty Cycle	t _{w/t}	40		60	%
Operating Temperature	Topr	-40		+85	°C
Storage Temperature	Tstg	-40		+85	°C

Note 1) To apply Min Value of VDD and VBAT, VDD and VBAT need to be supplied with more than 2.5V at least for the oscillation to stabilize (oscillation start time tSTA).



Block Diagram

Figure 1) Top, and Side Views

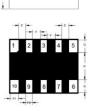
PART NUMBER: ECS-RTC-3225-5699C3-TR



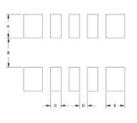


Dimensions (mm)





Dimension	Min.	Тур.	Max.	
Α	3.0	3.2	3.4	
В	2.3	2.5	2.7	
С		1.0		
Е		0.3		
F		0.4		
G		0.6		
Н		1.3		
Fl		0.45		
F2		0.3		
		[]	(Unit: mm	



0.9 1.1
1.1
0.4
0.3
0.7

Figure 1) Tope, Side, Bottom View

Figure 2) Suggested Soldering Pattern

Pin Number	Pin Name	I/O	Description		
1	FOE	In	FOUT output control pin. "1" - enable FOUT, "0"- FOUT Hi-Z		
2	VDD	-	Power supply		
3	VBAT	ka.	Backup battery pin. Connect to large-capacity capacitors or a backup battery. Connect to V_{DD} when switchover function is not necessary		
4	FOUT	Out	Frequency output. Controlled by FOE. Frequency can be set by FSEL bits.		
5	SCL	In	I ² C clock signal		
6	T1	82	Manufacturer test only. Ensure to be floating		
7	SDA	In/Out	I ² C data signal		
8	T2	17	Manufacturer test only. Ensure to be floating		
9	GND	-	Ground		
10	/INT	Out	Interrupt Output, Open-Drain		

Figure 3) Pin Function