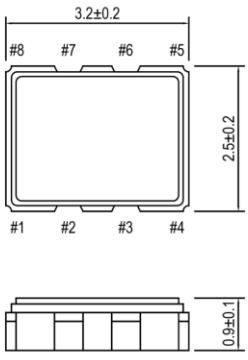
TITLE	DATE
	April 24, 2019

1. Part No. : 327SMO-RTC
2. Nominal frequency : 32.768 kHz
3. Frequency tolerance : ±5 ppm (+25℃ ±2℃)
4. Frequency stability : 327SMO-RTC(LT) : ±7 ppm max. (-40℃ to +105℃ ref. to +25℃)
   327SMO-RTC(LV) : ±5 ppm max. (-40℃ to +85℃ ref. to +25℃)
   327SMO-RTC(LW) : ±3.8 ppm max. (-10℃ to +60℃ ref. to +25℃)
5. Operating Conditions
   - Operating temperature : -40℃ to +105℃
   - Temperature compensated voltage (Vcomp) : +2.0V to +5.5V
   - Interface supply voltage(Vintf): +1.5V to +5.5V
   - Time keeping supply voltage(Vtime) : +1.3V to +5.5V
6. Storage temperature range : -40℃ to +105℃
7. Input current : 4.5 μA max. (VDD = +3.0V, E/D = VDD without load, SCL=SDA=/INT=V_{DD})
8. Stand-by current : 4.0 μA max. (VDD = +3.0V, E/D = GND, SCL=SDA=/INT=V_{DD})
9. Output (-40℃ to +105℃)
   - Symmetry : 40% to 60% at 1/2VDD level (CL = 15pF)
   - Rise and fall times : 70 ns max. (CL= 15pF, VDD = +3.0V)
     (20%VDD to 80%VDD level)
   - "0" level : V_{OL} : 0.2VDD max.
   - "1" level : V_{OH} : 0.8VDD min.
   - Load : 15 pF max. (CMOS)
10. Start-up time : 3 sec. max. (-40℃ to +105℃)
11. Aging: ±3ppm for first year at +25℃
12. Frequency selection function: 32.768kHz, 1024Hz, 32Hz, 1Hz (Pin#6=SCL, Pin#7=SDA)
13. I^2C-BUS serial interface type: 400kHz high speed mode
14. Low voltage detection voltage: +1.3V min.
15. Reflow soldering conditions : +255℃ ±5℃ for 10 seconds
    +170℃ ±10℃ for 1 to 2 minutes (preheating)
16. Outline dimensions : See below

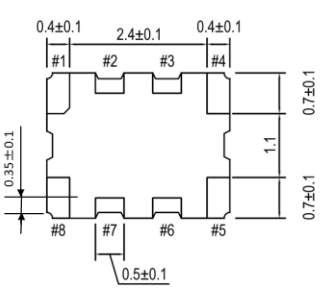
327SMO-RTC
RoHS compliant (Pb-free)

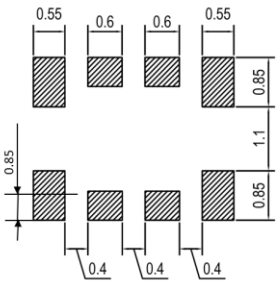


PIN	CONNECTION		I/O	FUNCTION
1	"L"	"H"	I	Enable/Disable
2	/INT		O	Time signals, Alarm signals, Constant cycle time signals & Time update signals (N-ch open drain terminal)
3	NC		-	(no connection)
4	GND		-	(ground)
5	Z	OUTPUT	O	32.768 kHz signal output (Pin#1="H") CMOS output
6	SCL		I	Serial clock input (I^2C-Bus Serial Interface Clock)
7	SDA		I/O	Serial data input/output (I^2C-Bus Serial Interface Data)
8	V_{DD}		-	(supply voltage)

Z : high impedance

The application manual available. Contact sales.





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SMI	ITEM	No.
	RTC CRYSTAL CLOCK OSCILLATORS	SO-10616B