## Surface Mount RTC Crystal Oscillator

Seam Sealed Ceramic 2.5 x 2.0 x 0.90mm with Tri-State Function

#### Features:

Parameters

- Compact and thin ceramic package with metalized for surface
- Automatic mounting and reflow soldering
- Use AT crystal as the resonator for temperature performance - Tri-state function
- Supply voltage of 1.8V, 2.8V, and 3.3V available
- Low power consumption
- RoHs Compliant (Pb Free)

## **Electrical Specifications:**

#### **Nominal Frequency** 32.768 kHz CMOS **Output Type** Supply Voltage 1.8V, 2.5V or 3.3V **Frequency Range** 4MHz to 50MHz **Frequency Stability** ± 25ppm, or specify Output Load 15pF, or specify **Oscillation Mode** AT Fundamental **Operating Temperature** -20°C ~ +70°C; -40°C ~ +85°C, or specify **Storage Temperature** -55°C ~ +125C° Supply Current 3mA Max Symmetry 45~55% 0.1VDD / 0.9VDD Voltage Vol(Max) / Voh (Min) Rise(Tr) / Fall (Tf) Time 200ns Max Start-up Time 2ms Max Tri-State Voltage Vol(Max) / Voh (Min) 0.3VDD / 0.7VDD Aging (at 25°C) ±3ppm / year Max

#### Part Numbering System:

(1) Series D4

Code	Voltage	Frequen
3	3.3V	B: ±50 ppm
2	2.5V	C: ±30 ppm
1	1.8V	D: ±25 ppm

② Supply Voltage

Frequency Stability	④ Frequency	
Frequency Stability	Frequency	
±50 ppm	32.768 kHz	
20 ppm		

Frequency	
32.768 kHz	

5 Operating Temperature		
Code	Ranges	
Nil	-10°C ~ +70°C	
А	-10°C ~ +60°C	
В	-20°C ~ +70°C	
Х	-40°C ~ +85°C	

6 Output	Load
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Code	Output Simmetry
Т	45% / 55%

(7) Output Load			
Code	Output Load		
15	15pF		
30	30pF		
50	50pF		



D4



**D4 Series** (4 Pads)

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#### Dimensions(Units:mm):

 $2.5\pm0.10$ 





**D4 Series** 

(4 Pads)

0.95

0.6

0.95