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Please download the latest datasheet of UMAL201421A012TA02 from the official website of Murata
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https://www.murata.com/en-sq/products/productdetail?partno=UMAL201421A012TA02

# UMAL201421A012TA02



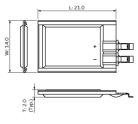






### Appearance & Shape





(in mm)



### Packaging Information

Packaging	Specifications	Minimum Order Quantity
Т	Вох	500



Murata has developed a miniature device with a high energy storage capacity, low ESR, fast charging and discharging and the ability to withstand load fluctuations. It may be used as a secondary battery in the same way as a capacitor. This energy device achieves better charge/discharge characteristics and has an extended service life superior to conventional batteries. Well suited as a power supply for wearable devices or sensor nodes for wireless sensor networks, this device maintains flat voltage characteristics while accommodating a wide range of load characteristics.

- High-rate charge/discharge\*
   Max. charge/discharge rate (current): 10 C (240 mA)
- 2. High safety

The highly safe design: Thermal runaway does not occur because of its small capacity and the use of chemically stable materials.

3. Extended service cycle life

Charge (capacity) recovery rate of 90% or higher after 5,000 cycles \*High-rate charge/discharge characteristics: The current rate at which the battery capacity is charged or discharged in one hour is defined as 1 C. As a description of battery performance, "high-rate charge/discharge characteristics" means that a large current relative to 1 C can be charged or discharged.

1 of 3

#### Attention

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2. This datasheet has only typical specifications because there is no space for detailed specifications.

Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering.



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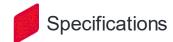
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# UMAL201421A012TA02



Nominal Voltage	2.3V
Charge Voltage	2.7V
Cut-off Voltage	1.8V
Nominal Capacity	12mAh
Max. Discharge Current	120mA(10C)
ESR	200mΩ
Operating Temperature Range	-20°C to 70°C
Size	21mm×14mm×2.0mm(typ.)

2 of 3

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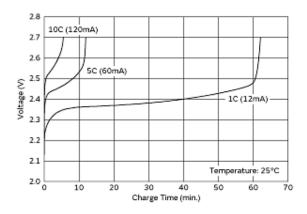


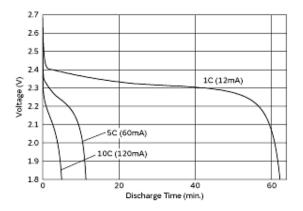
URL: https://www.murata.com/

Last updated :2019/11/19

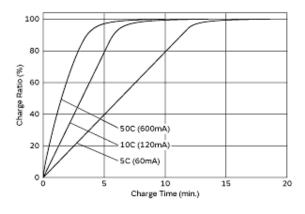
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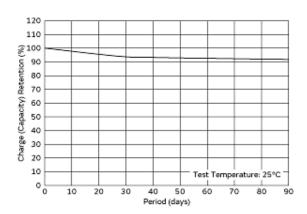




### Charge Characteristic



### Discharge Characteristic



SoC/Charge Current Dependence

Charge(capacity) Retention

3 of 3

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