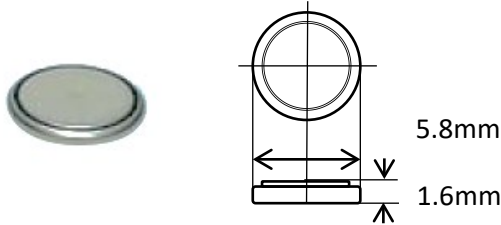


MT516F

Coin-type Manganese Titanium Rechargeable Lithium Batteries



Features & Benefits

- High-current 1.5V lithium rechargeable battery with sustained discharge endurance.

Specifications

Charging Voltage		1.8V~2.6V
Nominal Voltage		1.5V
Nominal Capacity ^{*1}		1.8mAh
Continuous drain		0.025mA
Dimensions ^{*2}	Diameter (Max.)	5.8mm
	Height (Max.)	1.6mm
Weight ^{*2}		Approx. 0.14g
Operating Temperature		-10°C to +60°C

^{*1} Based on standard drain and cut-off voltage down to 2.0V at 20°C.

^{*2} Without tabs.

Applications

Watches, etc.

Terminal types

Please see the terminal and lead wire settings for each product number.

* Reference

- [Line up of tab terminal types\(by shape\)](#)
- [Line up of tab terminal types\(by product number\)](#)

Charging circuits

Please ask Panasonic about constant-current charging system.

The charging circuit is crucial in terms of ensuring that full justice will be done to the battery characteristics.

Please study it carefully as the wrong charging circuit can cause trouble.

Charging/discharging cycle	Approx. 500times at 100% discharge depth to nominal capacity.
Charging system	Constant-voltage system
Operating temperature	-10°C to +60°C

Panasonic Energy Co., Ltd.

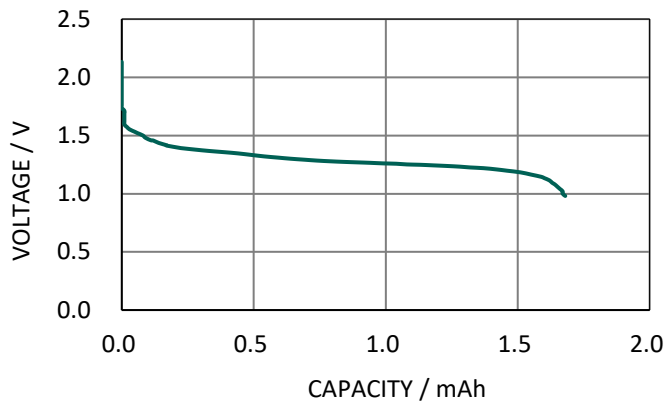
https://industrial.panasonic.com/ww/products/pt/coin_rechargeable_lithium

As of April, 2022. This data in this document is for descriptive purposes only and is not intended to make or imply any guarantee or warranty. The contents of this product information are subject to change without notice.



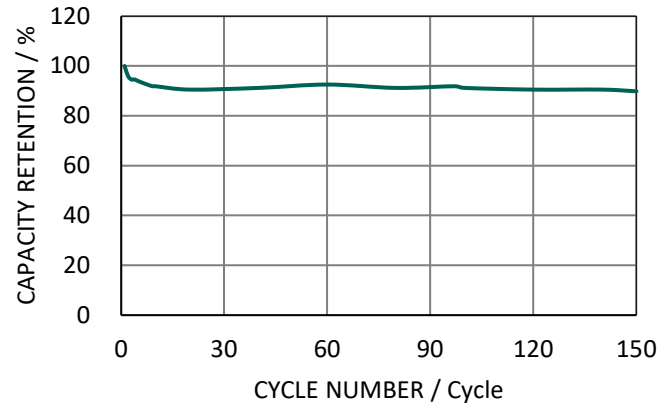
Characteristics

Discharging Characteristics



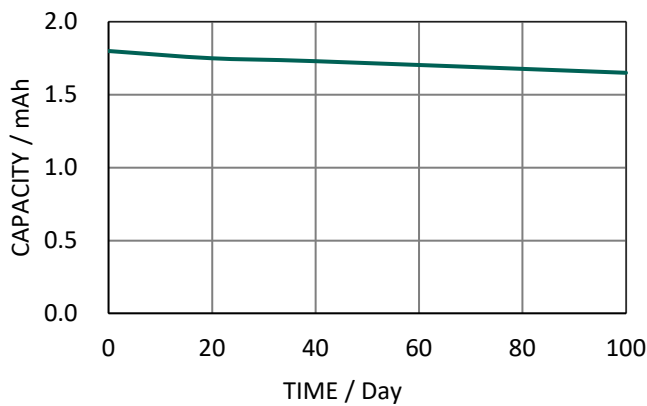
Charging Condition : CV(2.3V, 360Ω, 24H, 20°C)
Discharging Condition : CR(51kΩ, 1.0V Cut-off, 20°C)

Cycle Life Characteristics



Charging Condition : CV(2.3V, 200Ω, 10H, 20°C)
Discharging Condition : CR(15kΩ, 1.0V Cut-off, 20°C)

Continuous Charging (60°C)



Handling Guidelines

- If a fixed-charging method is applied, please adhere to the specified charging voltage.**
Guaranteed voltage is 1.8V to 2.6V at the temperature of -10°C to 60°C.
If the charging voltage exceeds the specifications, the internal resistance of the battery will rise and may cause battery deterioration.
Also with a charge voltage around 4V, corrosion of the positive(+) terminal (case) may occur causing leakage.
It is not possible for the battery to recover completely when the charging voltage is below the specification.
- Under no circumstances trickle charging should be used.**
Ignoring this precaution will cause the battery voltage to rise to about 5V, resulting in a deterioration of performance.

