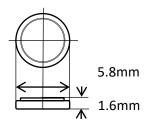


# **MT516F**

### **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

<sup>\*1</sup> Based on standard drain and cut-off voltage down to 2.0V at 20°C.

## **Applications**

Watches, etc.

## **Terminal types**

Please see the documents for the terminal and lead wire settings.

- 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.

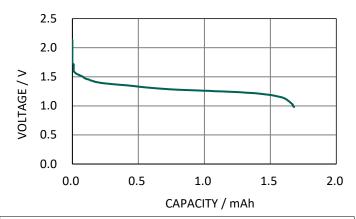


<sup>\*2</sup> Without tabs.

## **Panasonic ENERGY**

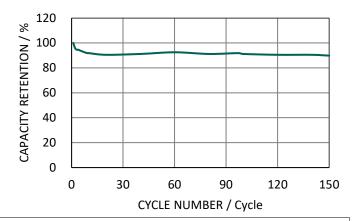
#### **Characteristics**

#### **Discharging Characteristics**



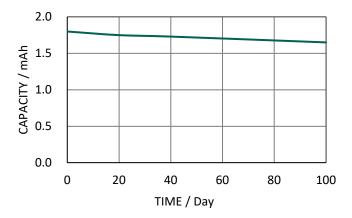
Charging Condition : CV(2.3V, 360 $\Omega$ , 24H, 20°C) Discharging Condition : CR(51k $\Omega$ , 1.0V Cut-off, 20°C)

#### **Cycle Life Characteristics**



Charging Condition : CV(2.3V, 200 $\Omega$ , 10H, 20°C) Discharging Condition : CR(15k $\Omega$ , 1.0V Cut-off, 20°C)

#### Continuous Charging (60°C)



# **Handling Guidelines**

1. 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.

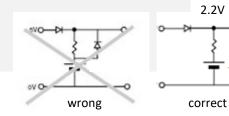
If the charging voltage exceeds the specifications, the internal resistance of the battery will rise and may cause battery deterioration.

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.

2. Under no circumstances trickle charging should be used.

Ignoring this precaution will cause the battery voltage to rise to about

Ignoring this precaution will cause the battery voltage to rise to about 5V, resulting in a deterioration of performance.



### Panasonic Energy Co., Ltd.

