

Lithium Ion Rechargeable Battery Technical Information

Model Number BMZ 21700 42 PM

1. General

1.1 Name

1.1.1 Model Number **BMZ 21700 42PM**

1.1.2 Cell Name **BMZ 21700 42PM**

1.2 Cell Shape and Weight

1.2.1 Cell Shape : Cylindrical

1.2.2 Size (with plastic tube) : Diameter 21.55mm max
Length 70.00mm max

1.2.3 Weight : 72.0.g Average

1.3 Safety Regulation

2. Performance

Nominal Capacity (0.2ItA discharge)	4160mAh 15.0Wh	average capacity 3.6V (average discharge voltage) at room temperature,2.0V cut off
Rated Capacity (0.2ItA discharge)	4000mAh 14.4Wh	minimum capacity at room temperature,2.0V cut off
Nominal Voltage	3.6V	
Internal Impedance	8.7mΩ Typ.	measured by AC1kHz
Cycle Performance	86% Min. of Initial capacity at 200 cycles	Charge at 3A, Cut off current 600mA, Discharge at 10A, 2.5V cut off, at room temperature.

* Standard Charge Condition

Charge Method : constant current constant voltage

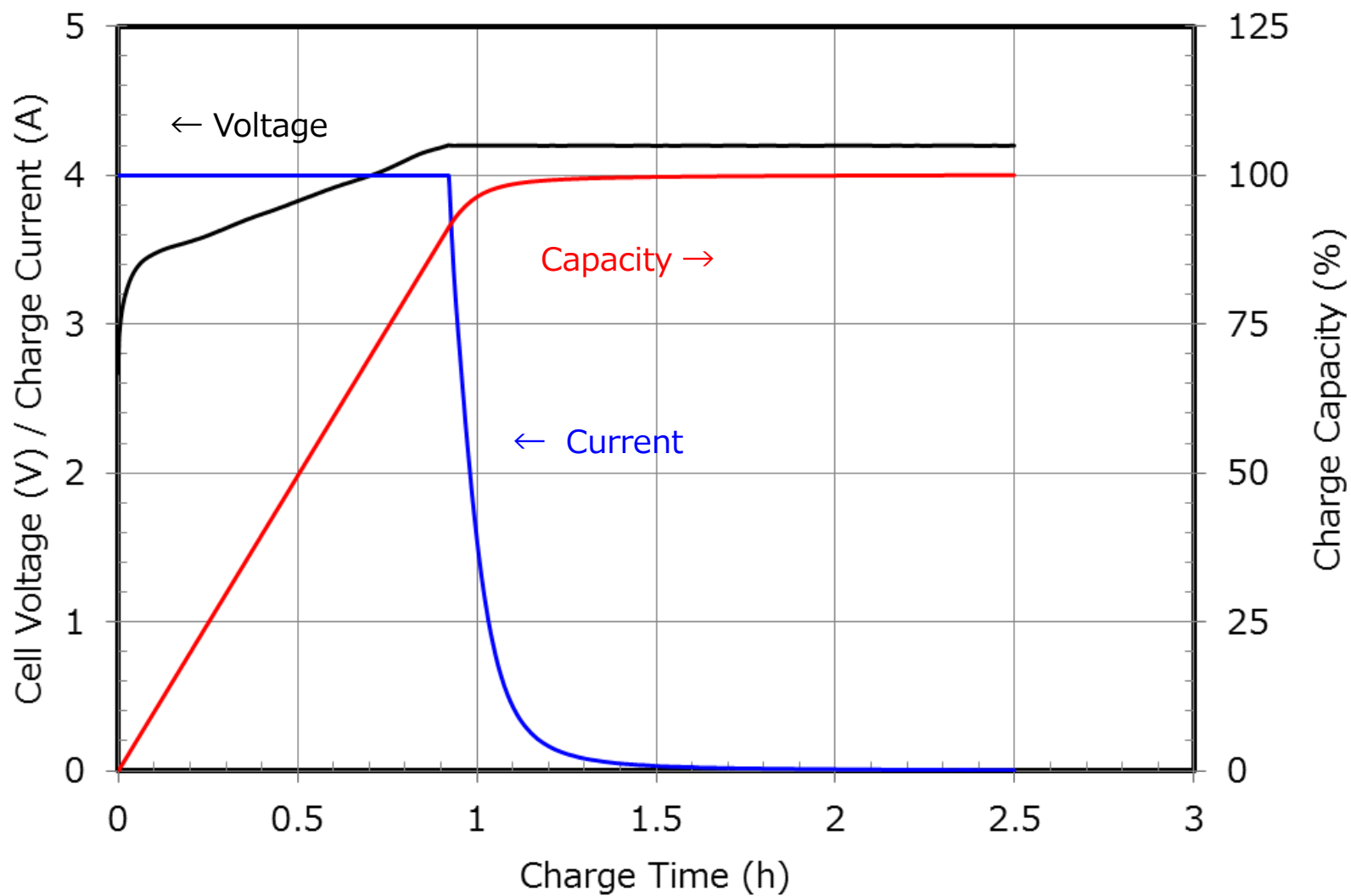
Charge Up Voltage : 4.2± 0.05V

Charge Current : 4.0A

Charge Time : 2.5h

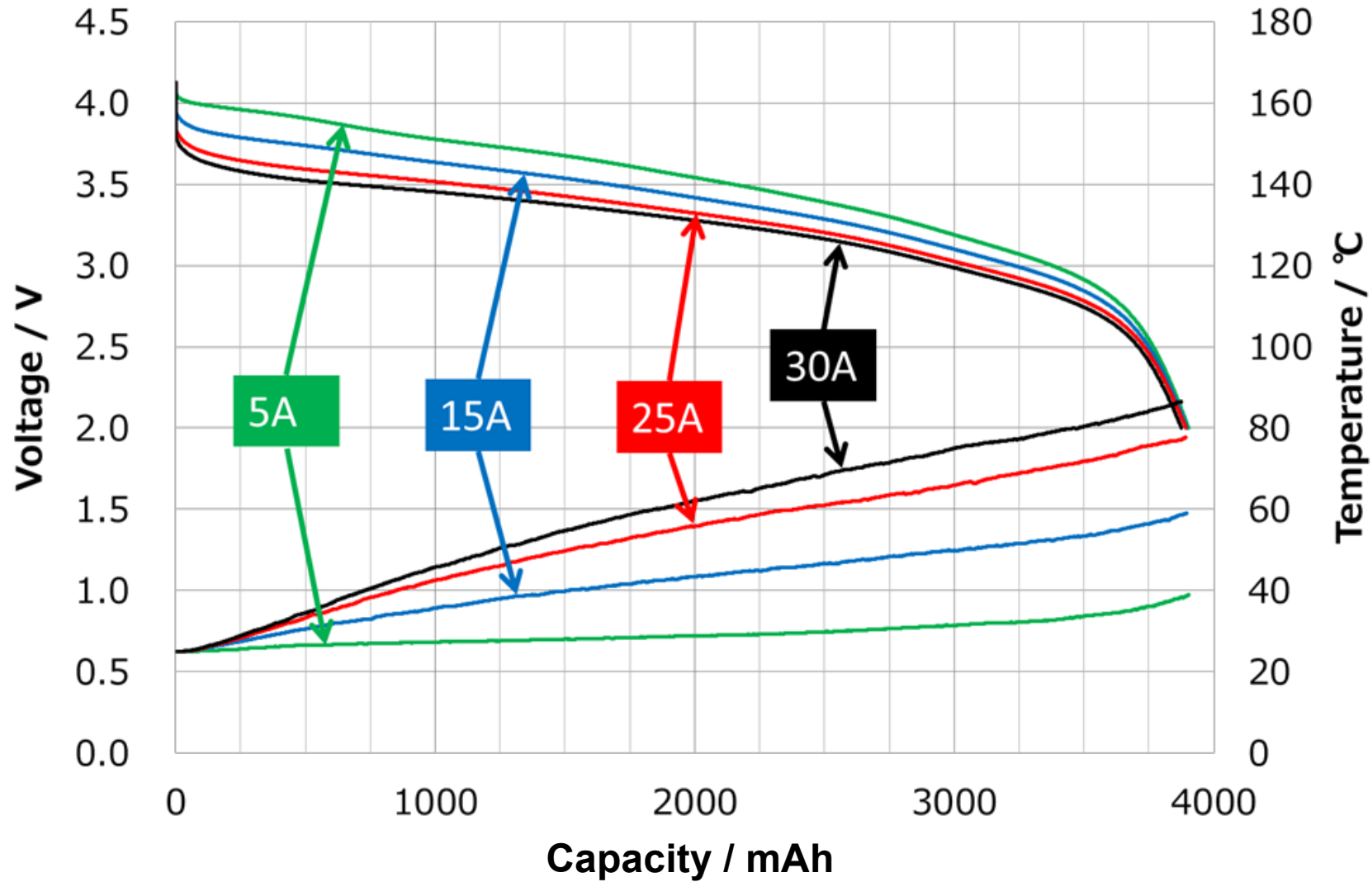
Ambient Temperature : 23°C

Charge Characteristics



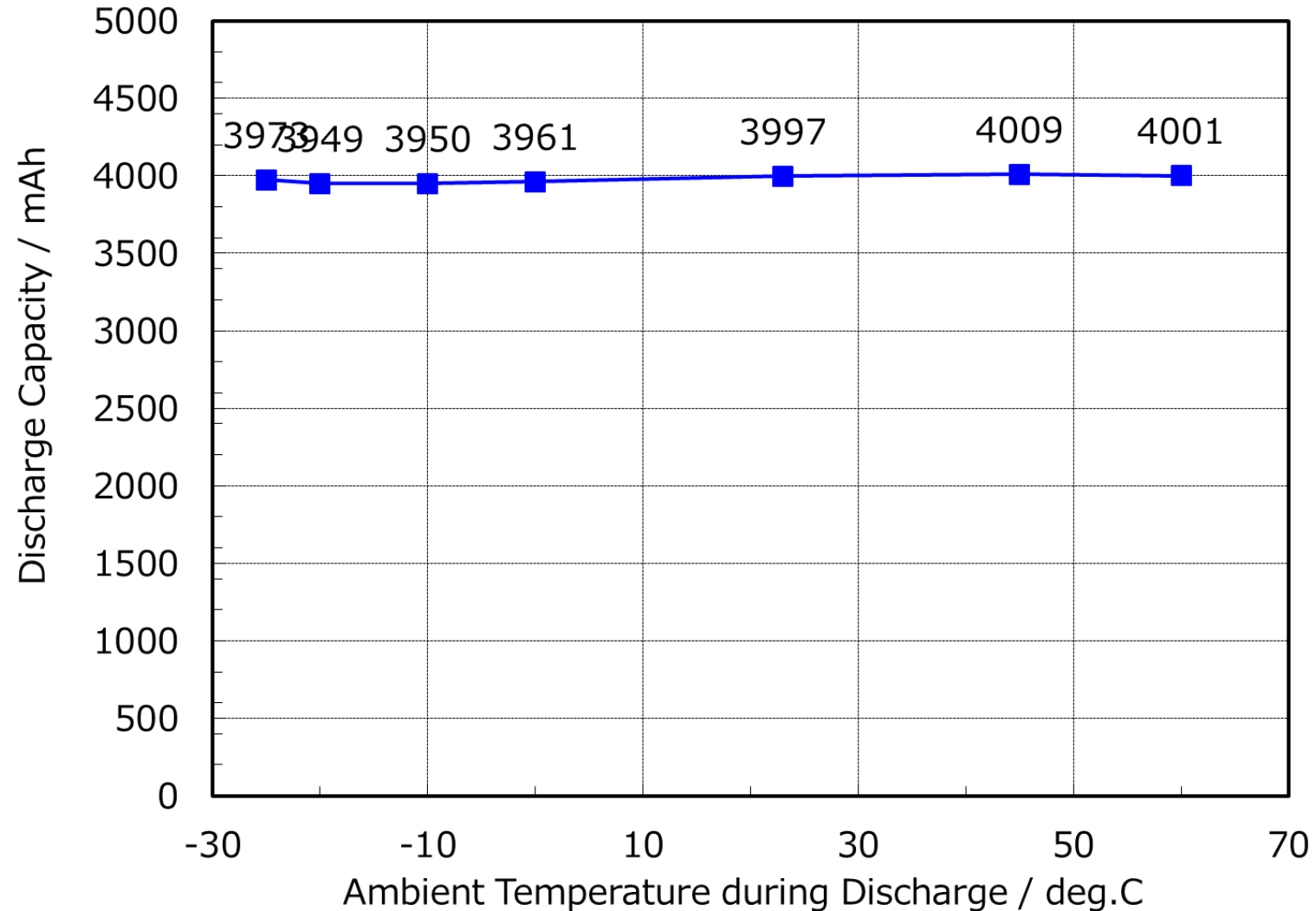
Charge: 4.2V / 4.0A / 2.5h cut @23deg.C

Discharge Load Characteristics Estimation



Charge: 4.15V / 6.0A / 0.5A cut @23deg.C
Discharge: xA / 2.0V @23deg.C

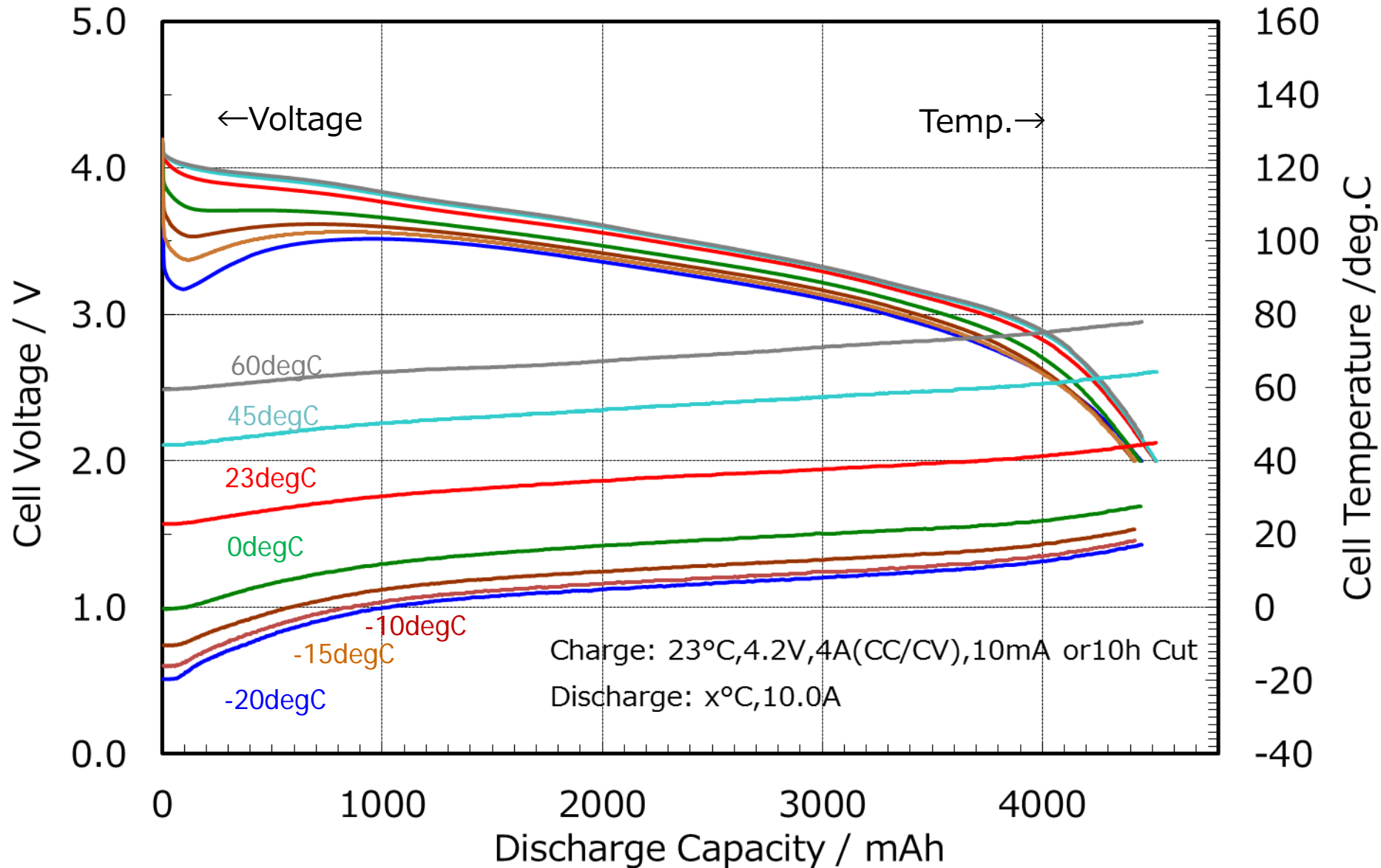
Temperature Dependence of Discharge Capacity



Charge: 4.2V / 4.0A / 10mA or 10h cut

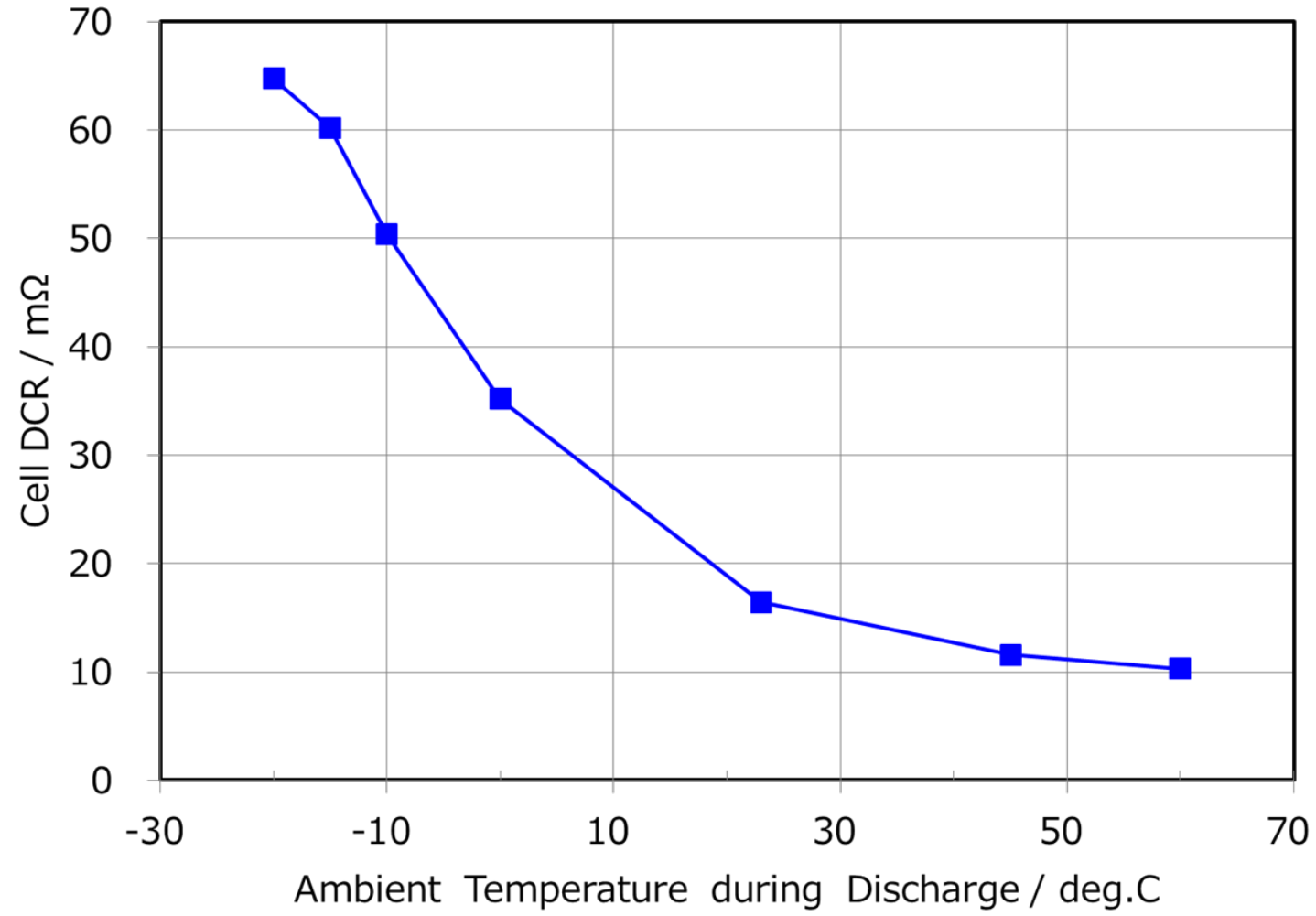
Discharge: 10.0A / 2.0V @ X deg.C

Temperature Dependence of Discharge Capacity

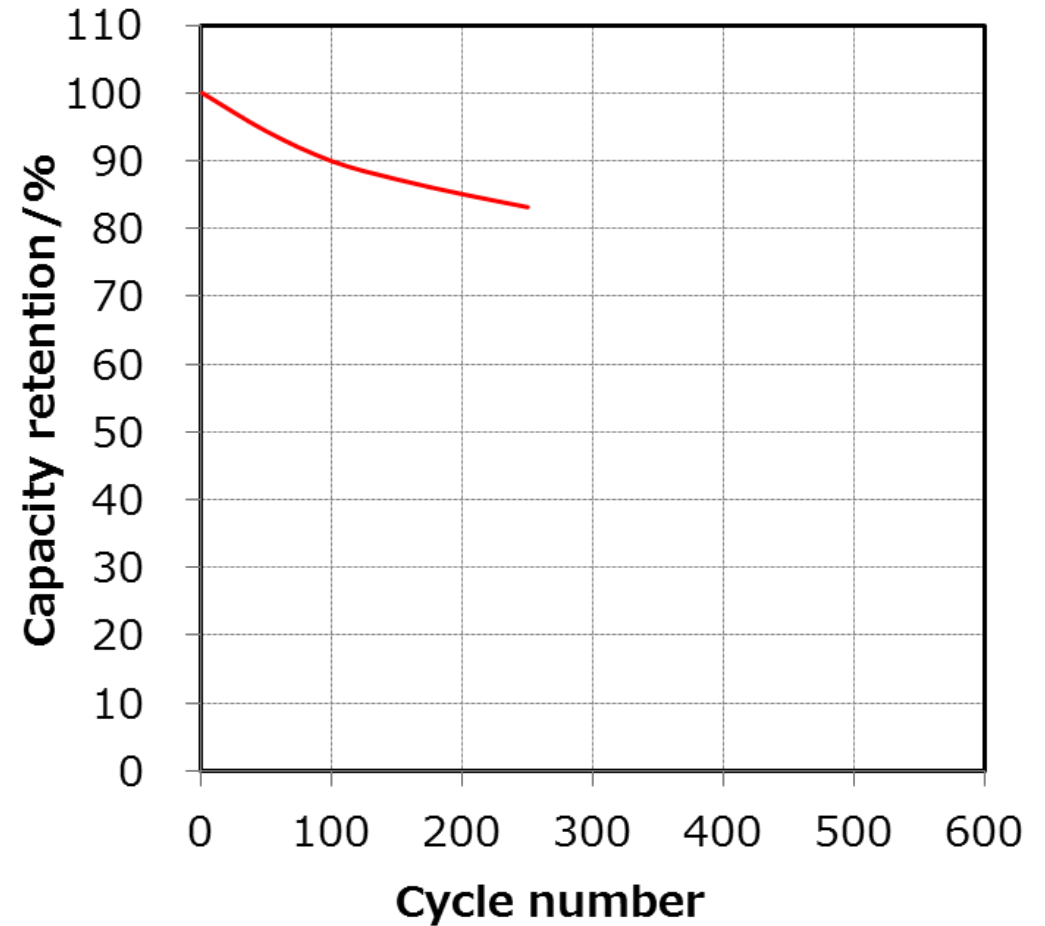
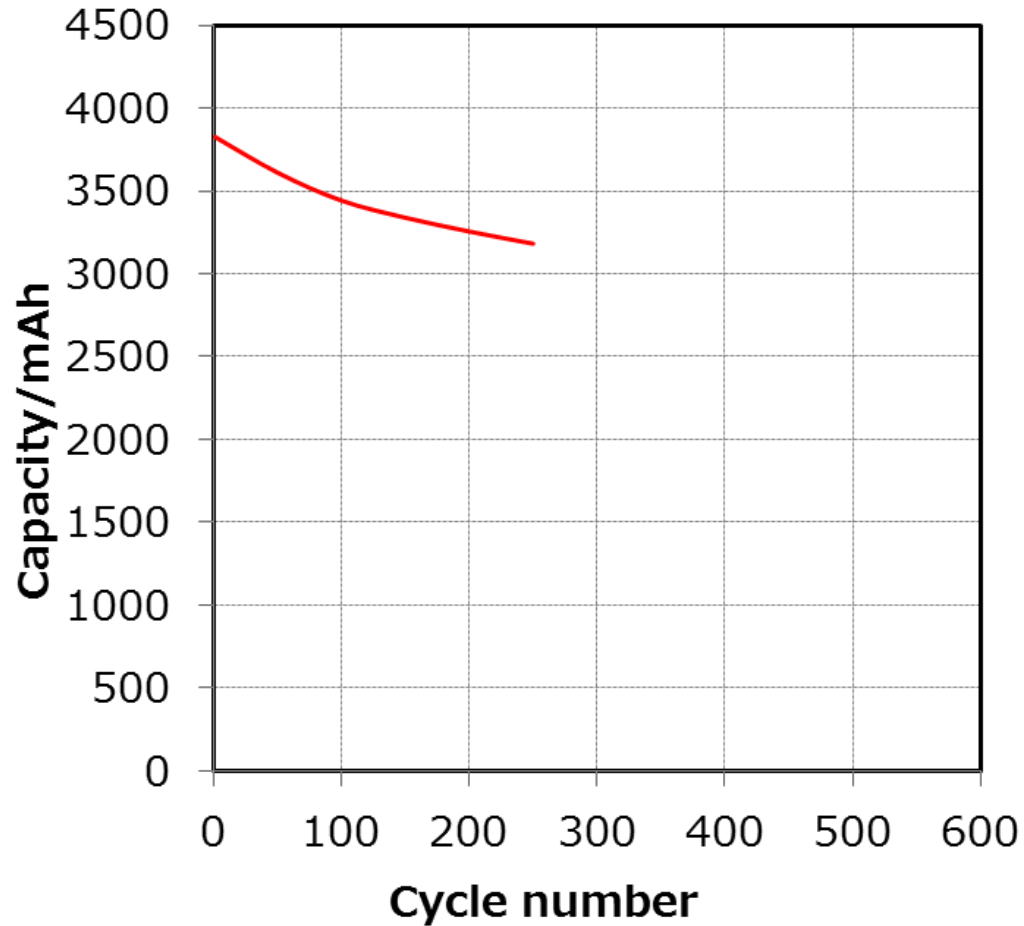


Charge: 4.2V / 4.0A / 10mA or 10h cut
Discharge: 10.0A / 2.0V @ -20, -15, -10, 0, 23, 45, 60deg.C

Temperature Dependence of DCR



Cycle Life Performance



Charge: 4.2V / 3.0A / 600mA cut @23deg.C
Discharge: 10.0A / 2.5V @23deg.C

Dimension with Plastic Tube

