

Li-ion Polymer Rechargeable Battery Technical Information

**Revision 0.2
2013.04.26**

Cell Name	US417799K
Cell Type	Polymer
Model Number	US417799K7S
Sony Code	49926850

**Sony Energy Devices Corporation
Device Solutions Business Group / Sony Corporation**

1. General

1.1 Scope

This specification applies to type
: US417799K7S Lithium Ion Polymer Rechargeable Battery

1.2 Name and Code

1.2.1 Cell Name : US417799K
1.2.2 Model Number : US417799K7S
1.2.3 Code : 49926850

1.3 Cell Shape and Weight

1.3.1 Cell Shape : Polymer
1.3.2 Size : Thickness 4.05 mm max
Width 77.00 mm max
Length(without tab) 98.70 mm max
1.3.3 Weight : 71.1 g (typical)

1.4 Reference test current

1.0 ItA : 3900 mA

1.5 Safety Regulation

Sony will acquire UL1642.

2. Performance

at room temperature, 3.0 V cutoff

Nominal Capacity (0.2ItA discharge)	4060 mAh 15.12 Wh	average capacity 3.723 V (average discharge voltage)
Rated Capacity (0.2ItA discharge)	3900 mAh 14.52 Wh	minimum capacity
Capacity at 0.5ItA	4046 mAh 14.95 Wh	average capacity
Capacity at 1.0ItA	4008 mAh 14.38 Wh	average capacity
Nominal Voltage	3.75 V	
Internal Impedance	28 mΩ	measured by AC1 kHz
Cycle Performance	80 % of Initial capacity at 400 cycles	0.5 ItA discharge rate

* Standard Charge Condition

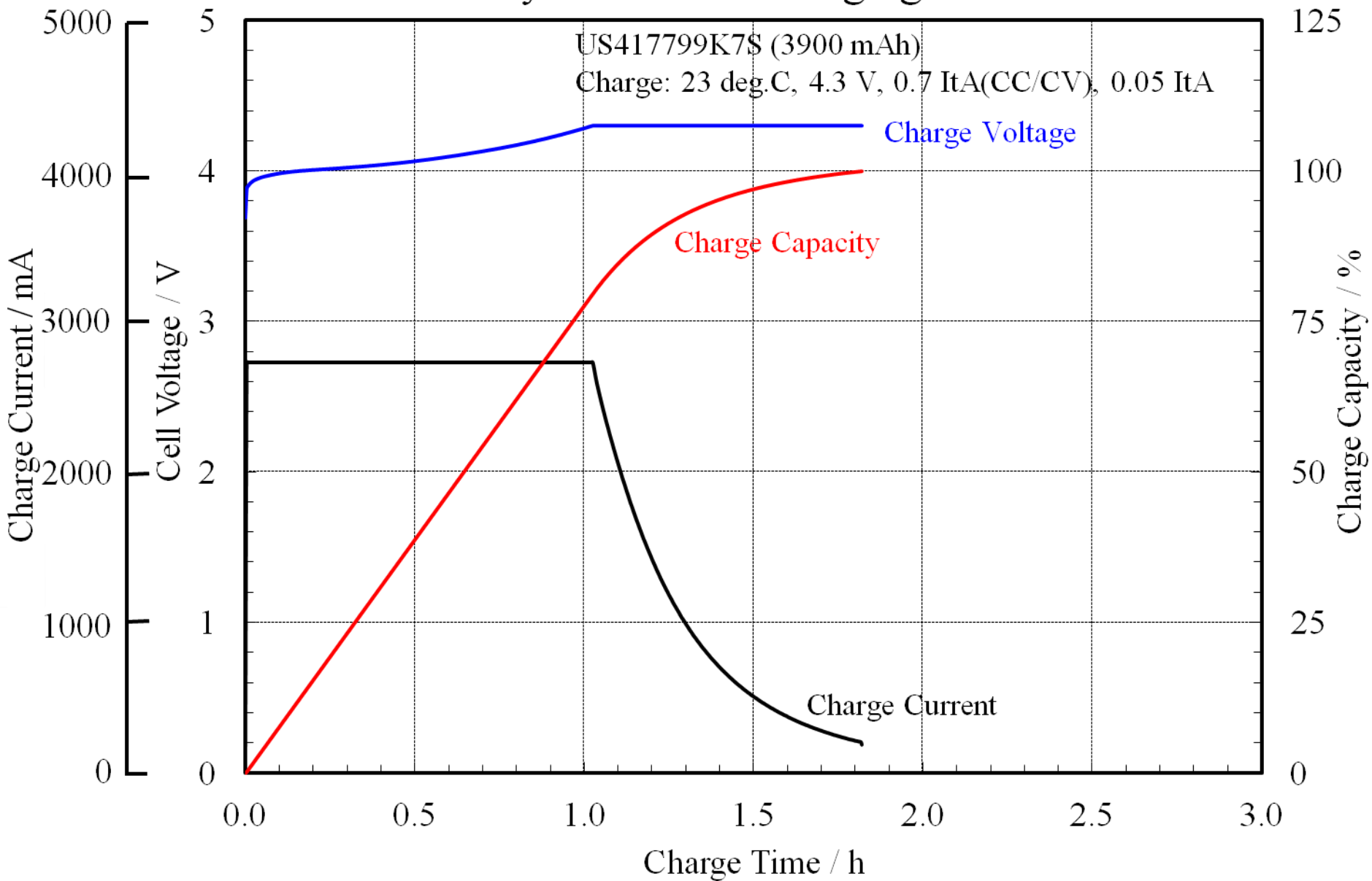
Charge Method : constant current / constant voltage
Charge Up Voltage : 4.3 V ± 0.005 V
Charge Current : 2.730 A
Charge Cut off Current : 195 mA
Ambiance Temperature : 23 °C

•Maximum Charge Current : 5.850 A

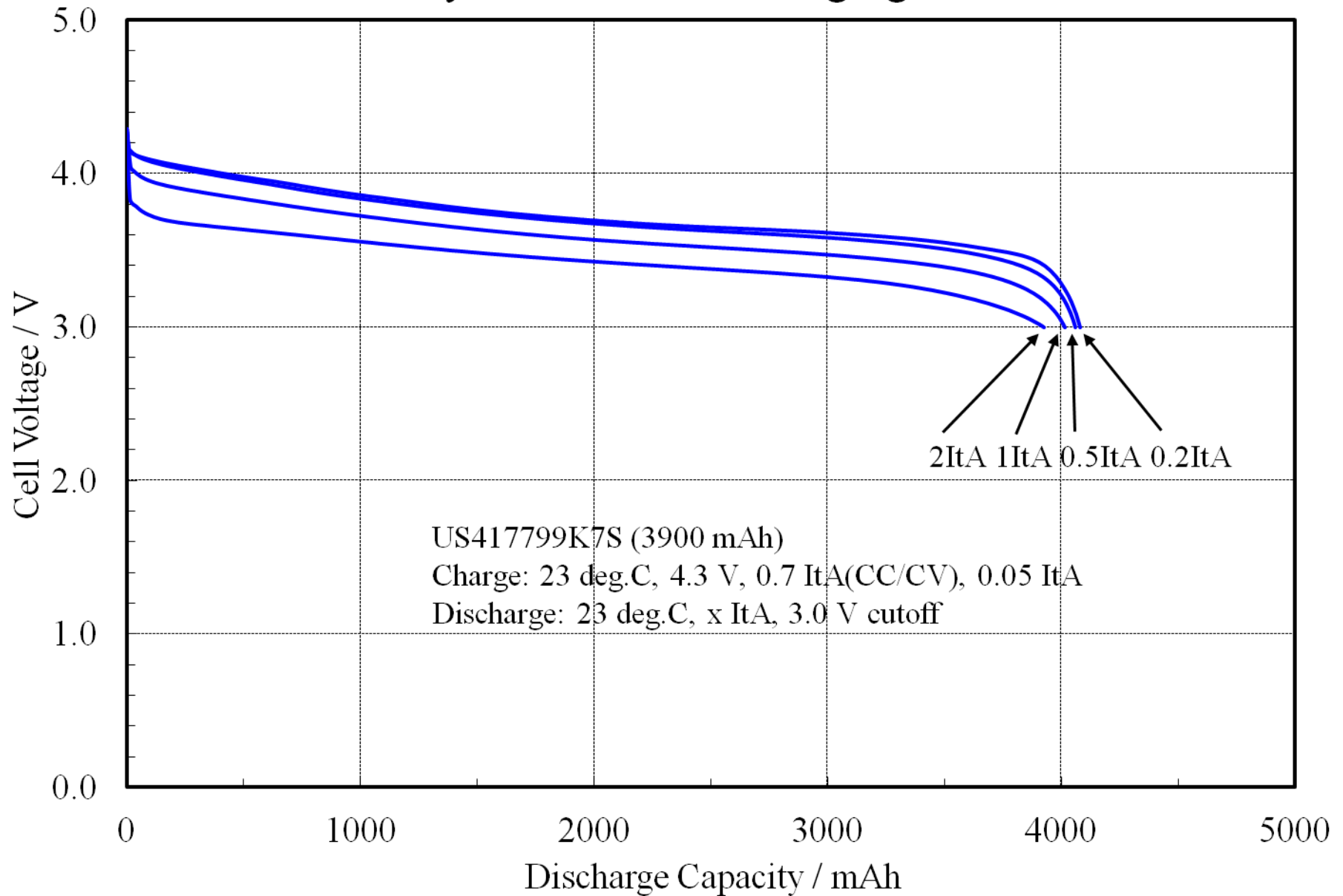
Note

This is target specification in planning stage.
Please confirm that some data can be changed in mass production.

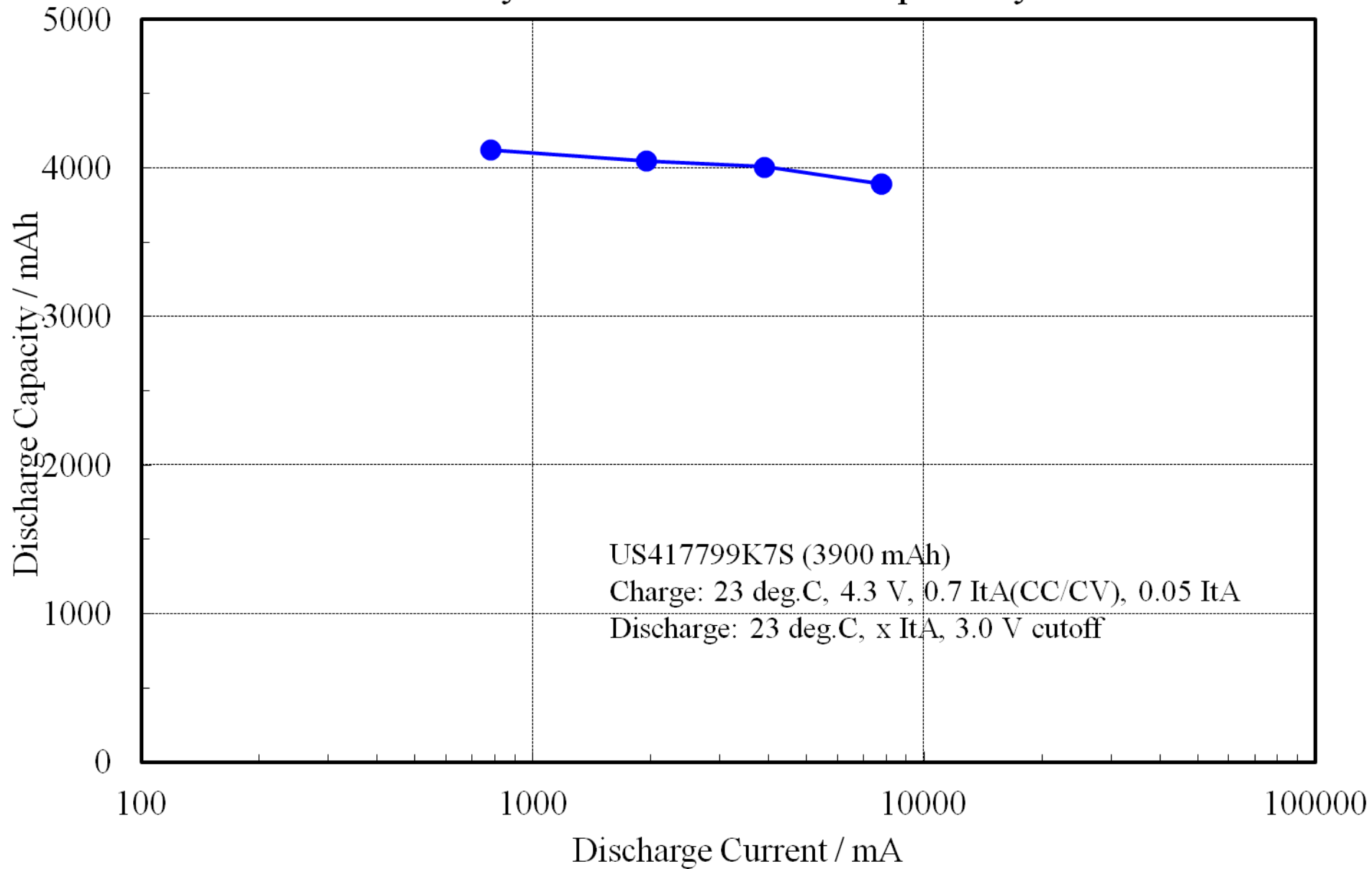
Sony Condition Charging Profile



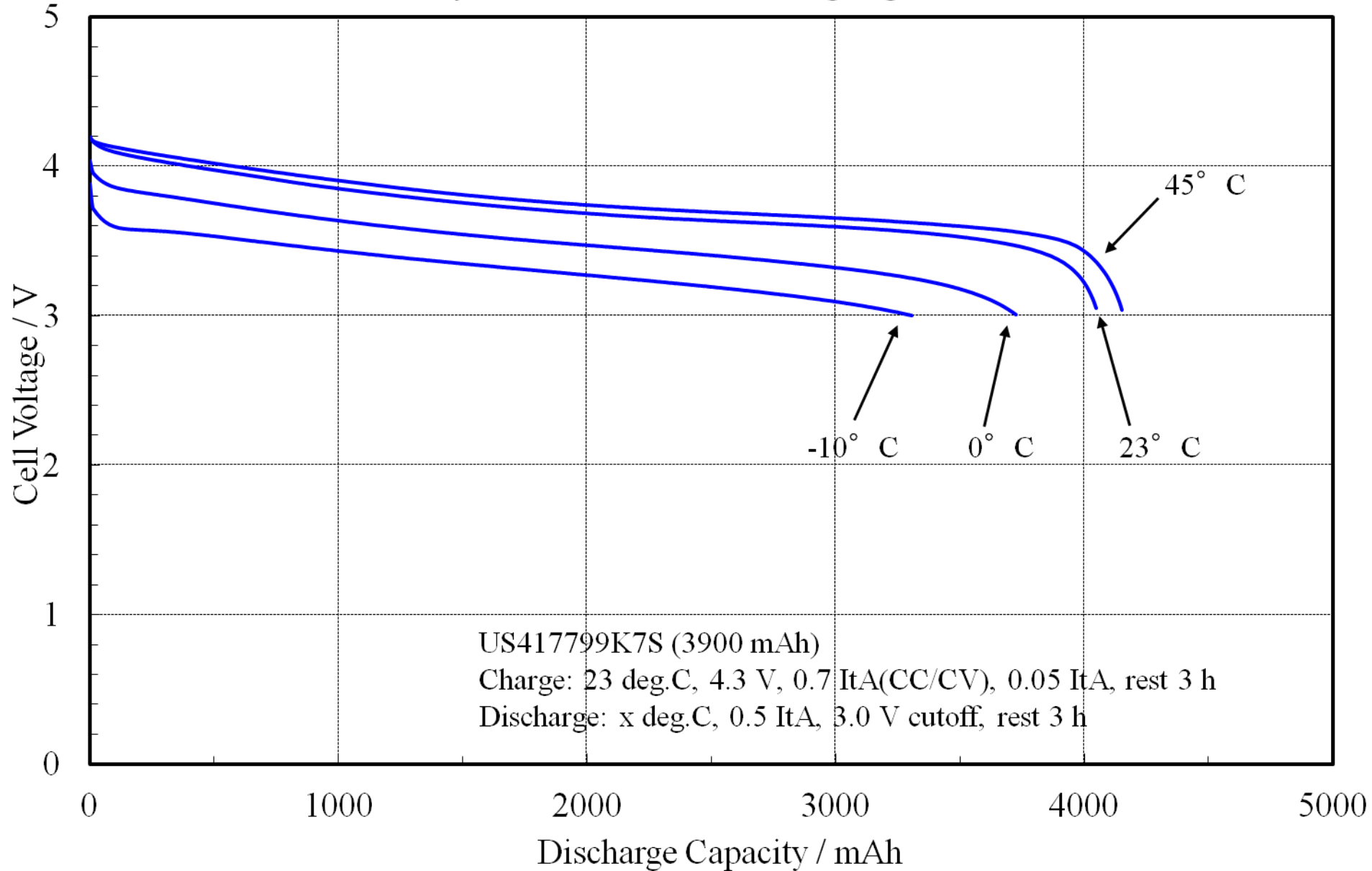
Sony Condition Discharging Profile



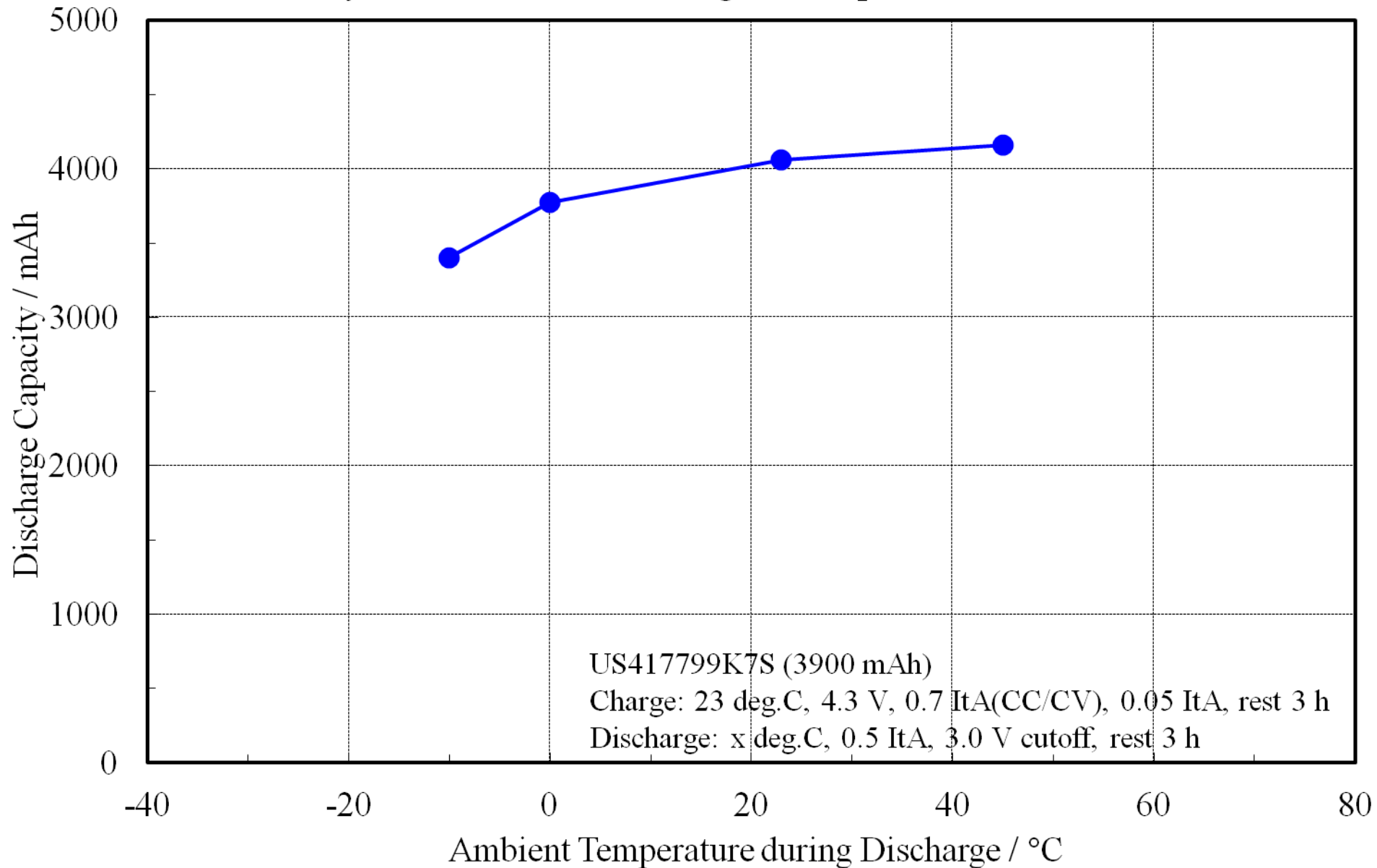
Sony Condition Drain Capability



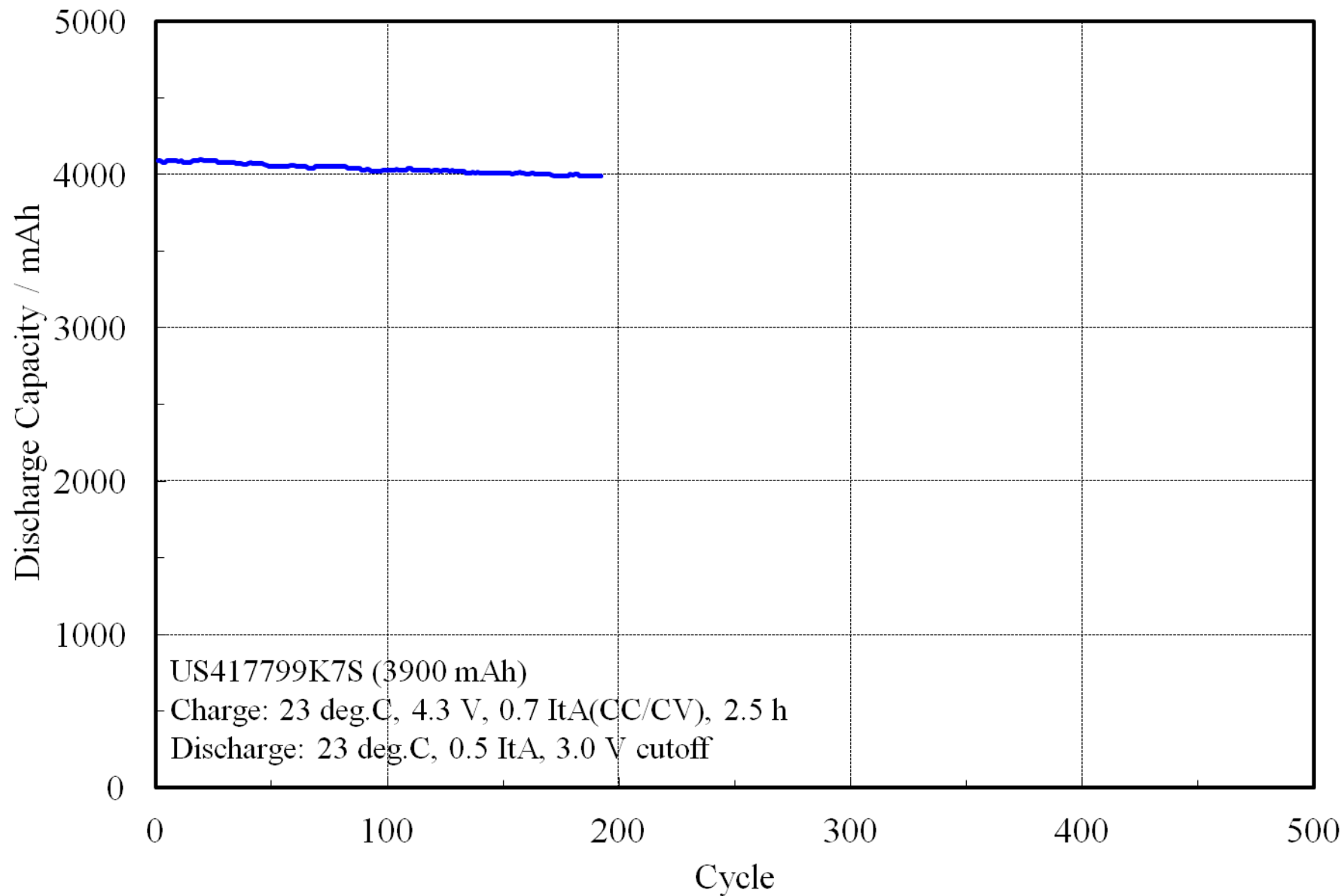
Sony Condition Discharging Profile



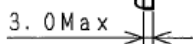
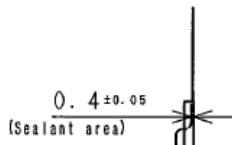
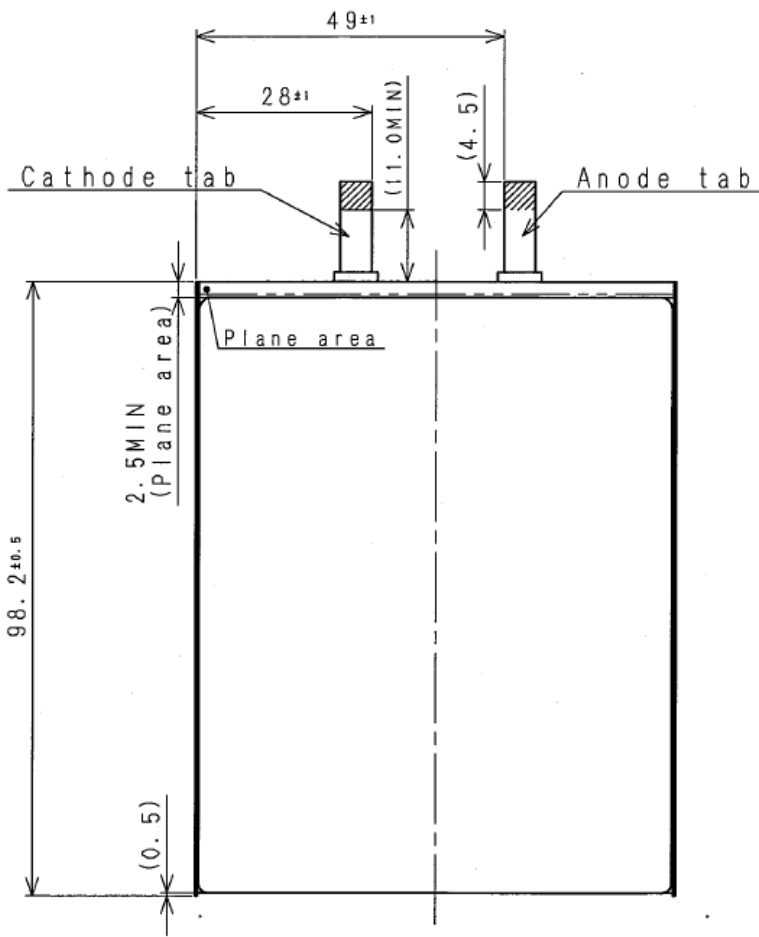
Sony Condition Discharge Temperature Performance



Sony Condition Cycle Performance



Cell Size (US417799K7S)



(Seal height)
Same opposite face

