

1. General

1.1 Scope

This specification applies to type
: US3978A4H5K Lithium Ion Polymer Rechargeable Battery

1.2 Name and Code

1.2.1 Cell Name : US3978A4H5

1.2.2 Model Number : US3978A4H5K

1.2.3 Code : 49942909

1.3 Cell Shape and Weight

1.3.1 Cell Shape : Polymer

1.3.2 Size : Thickness 3.90 mm max
Width 77.40 mm max
Length(without tab) 103.50 mm max

1.3.3 Weight : 78.0 g (typical)

1.4 Reference test current

1.0 ItA : 4720 mA

1.5 Safety Regulation

Murata acquired UL1642.

2. Performance

at room temperature, 3.0 V cutoff

Nominal Capacity (0.2ItA discharge)	4870 mAh 18.50 Wh	average capacity 3.80 V (average discharge voltage)
Rated Capacity (0.2ItA discharge)	4720 mAh 17.93 Wh	minimum capacity
Capacity at 0.5ItA	4823mAh 17.91 Wh	average capacity
Capacity at 1.0ItA	4725mAh 16.98 Wh	average capacity
Nominal Voltage	3.80 V	
Internal Impedance	42 mΩ	measured by AC1 kHz
Cycle Performance	80 % of Initial capacity at 500 cycles	0.5 ItA discharge rate

* Standard Charge Condition

Charge Method : constant current / constant voltage

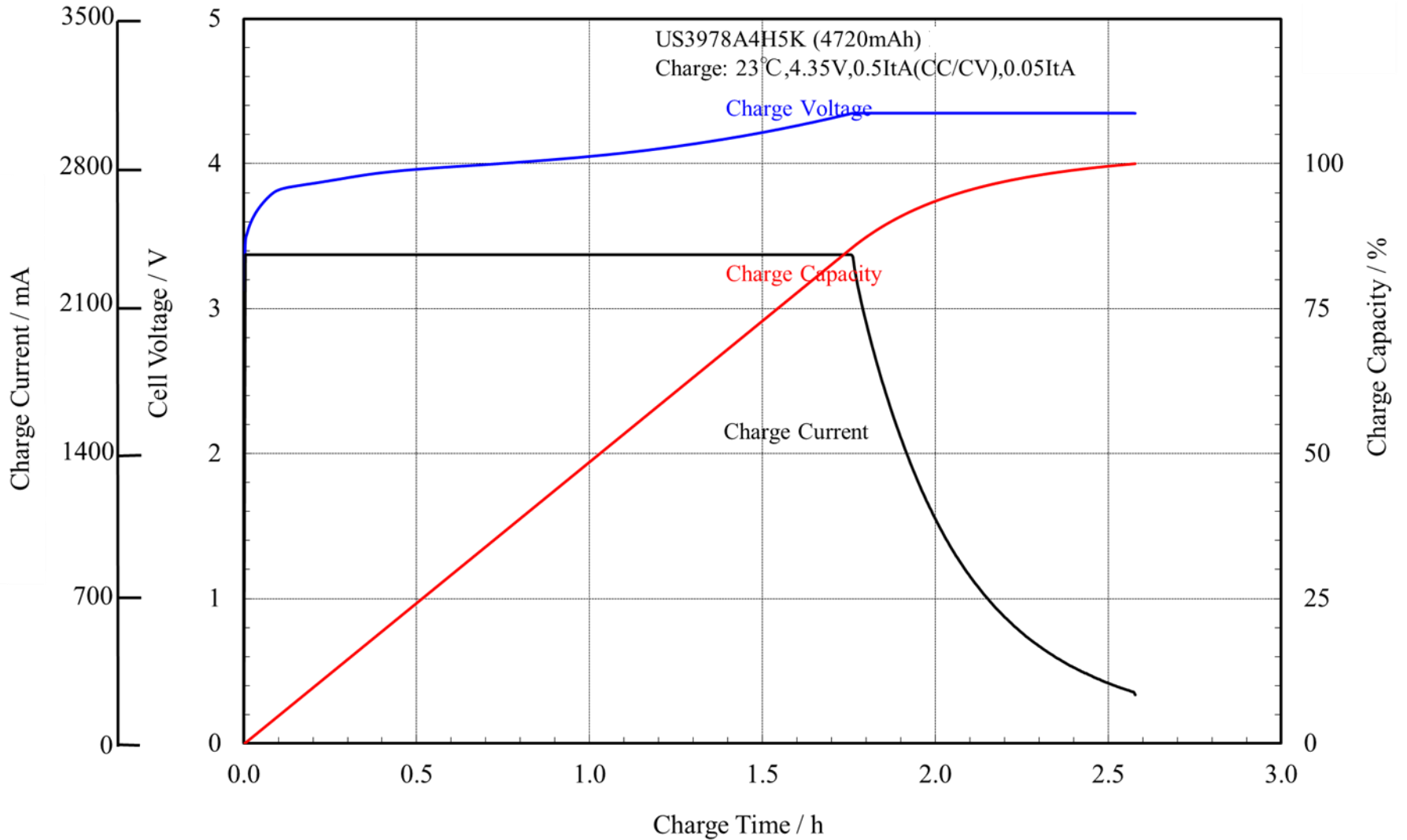
Charge Up Voltage : 4.35 V ± 0.05 V

Charge Current : 2.360 A

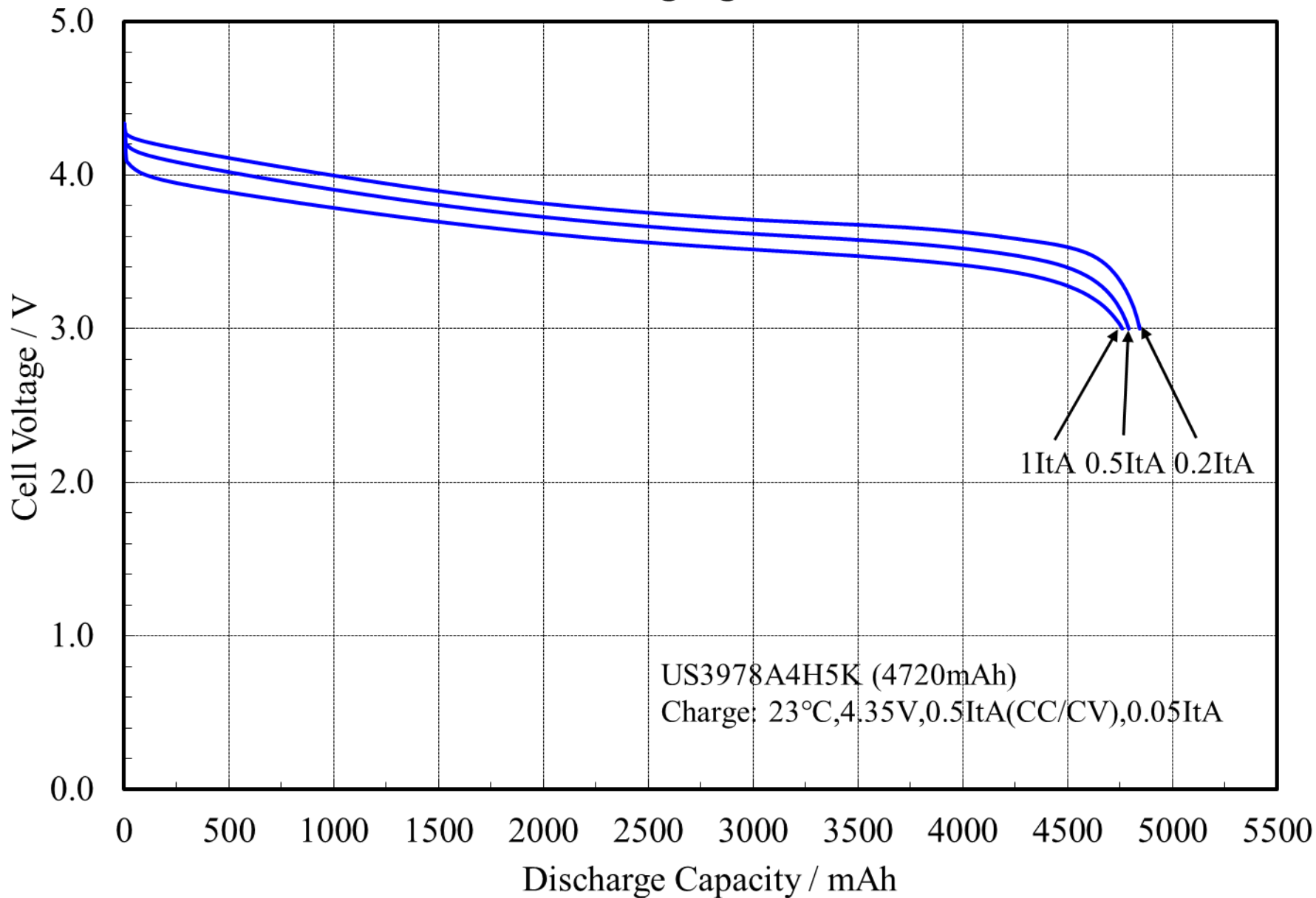
Charge Cut off Current : 236 mA

Ambiance Temperature : 23 °C

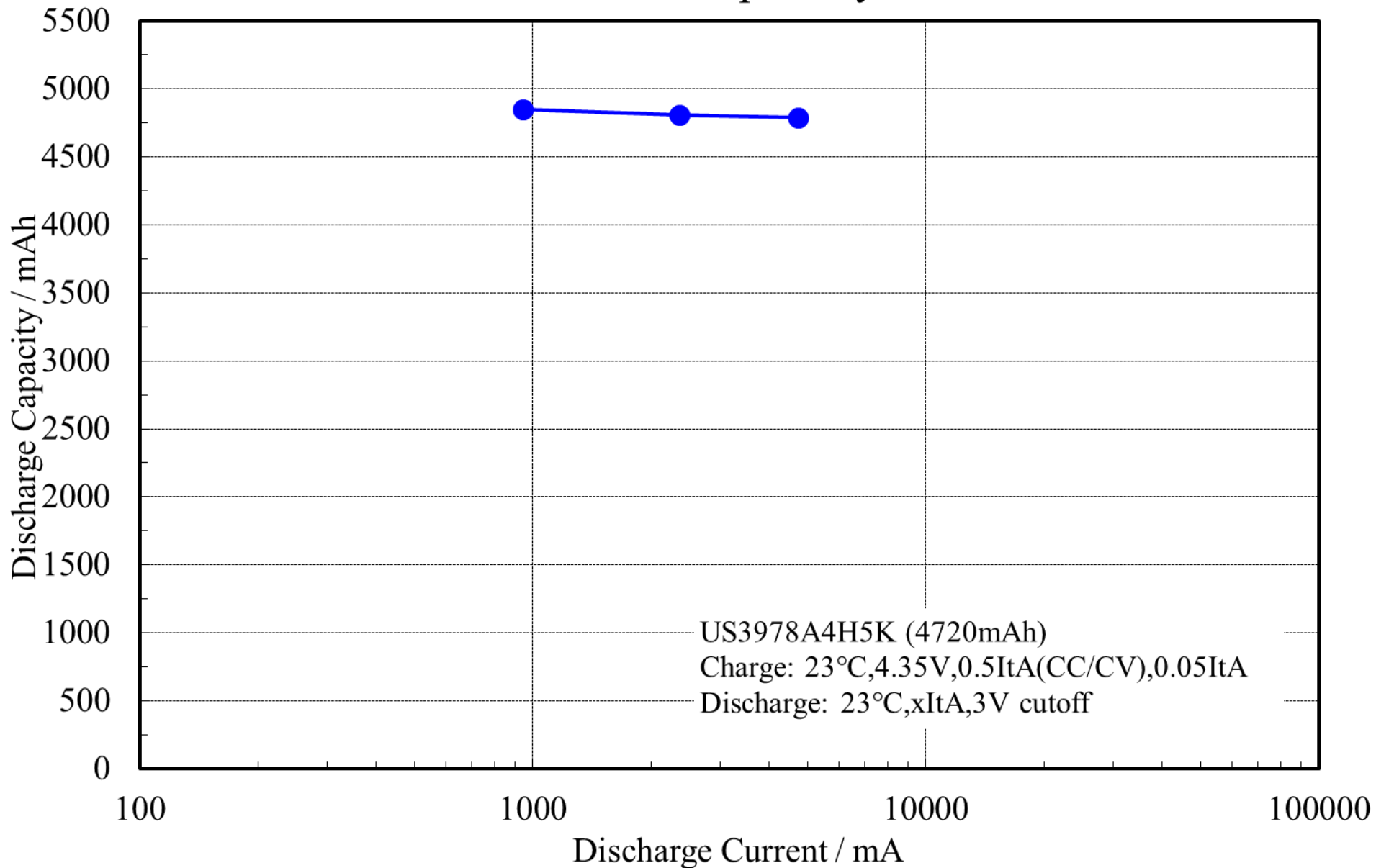
Charging Profile



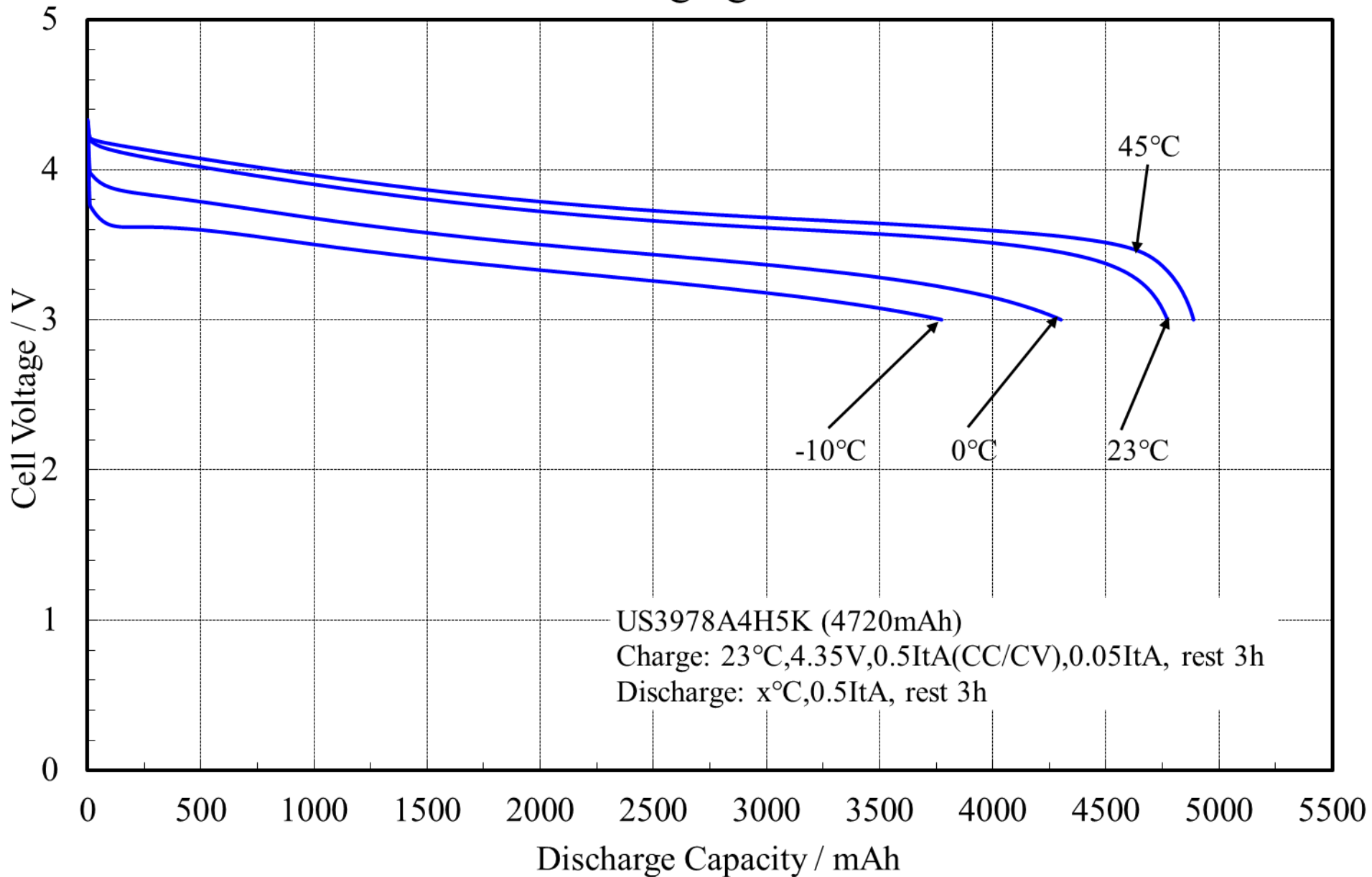
Discharging Profile



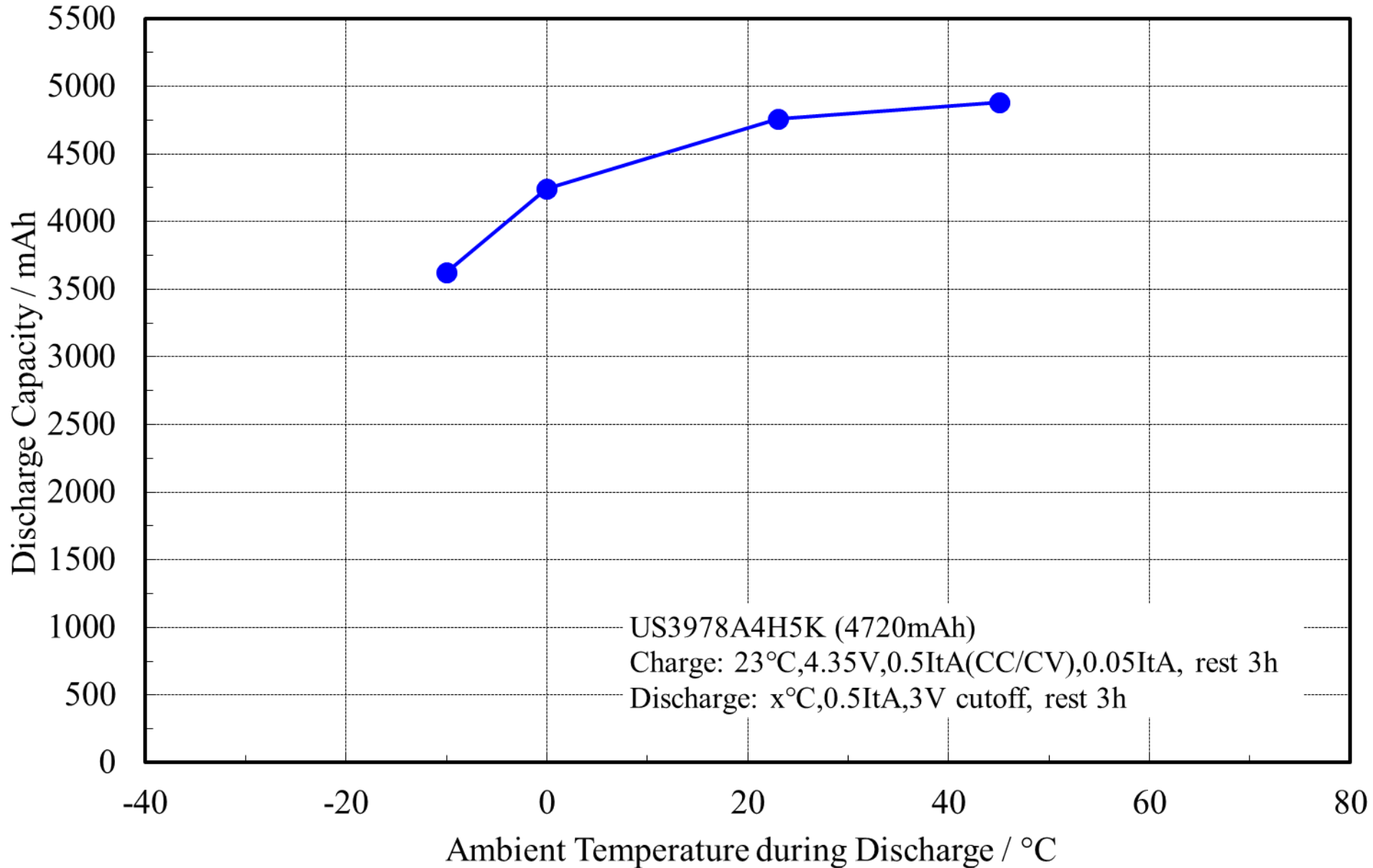
Drain Capability



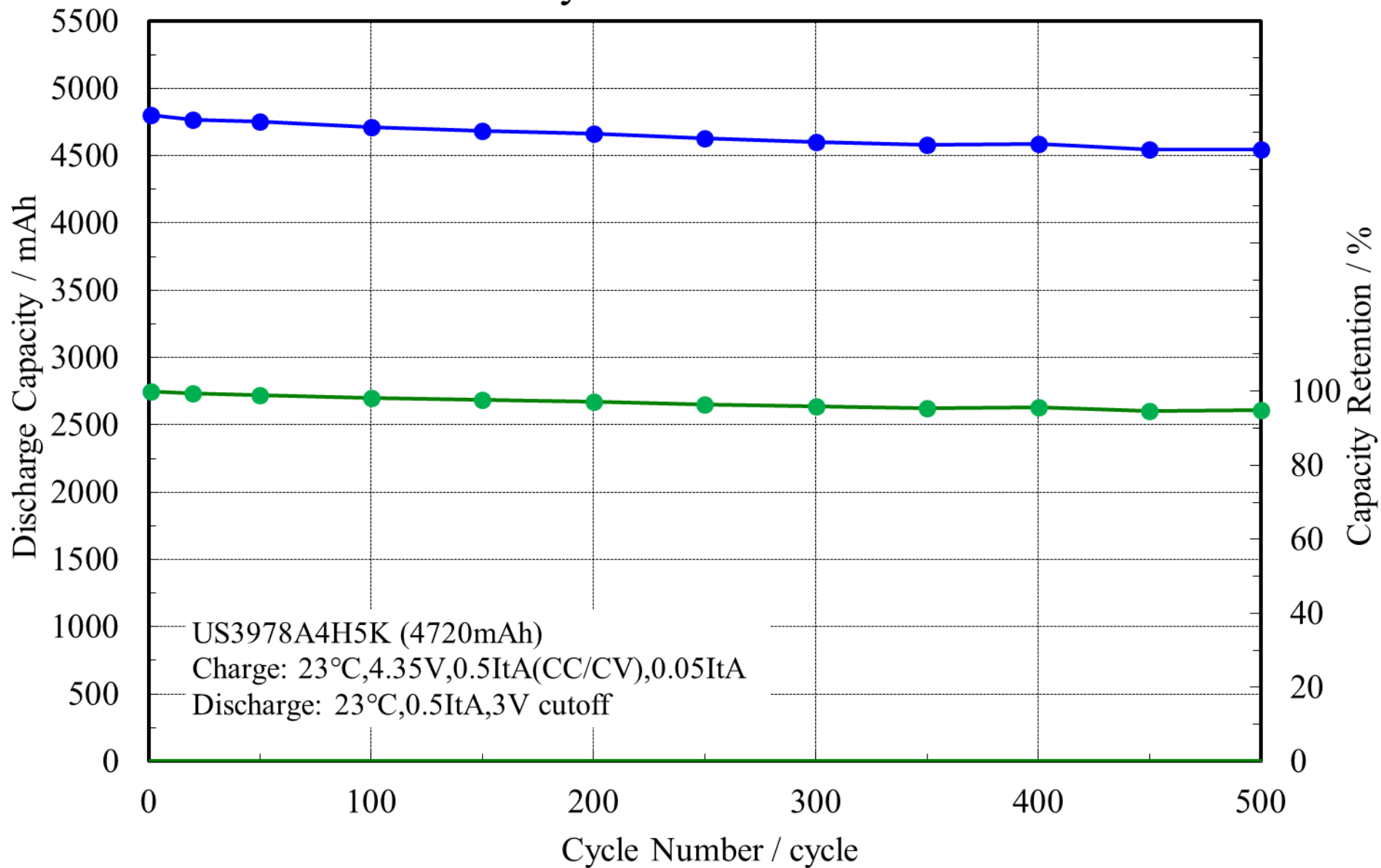
Discharging Profile



Discharge Temperature Performance



Cycle Performance



Cell Size (US3978A4H5K)

