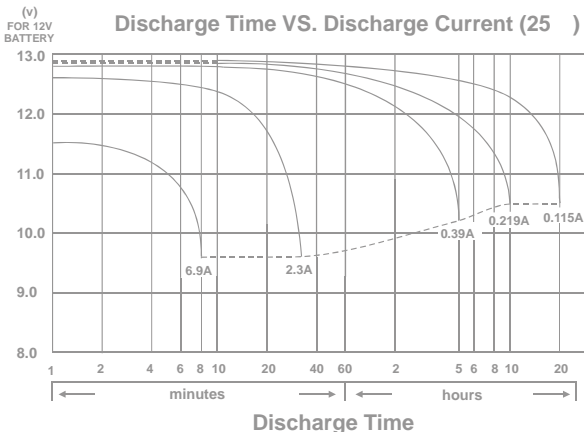
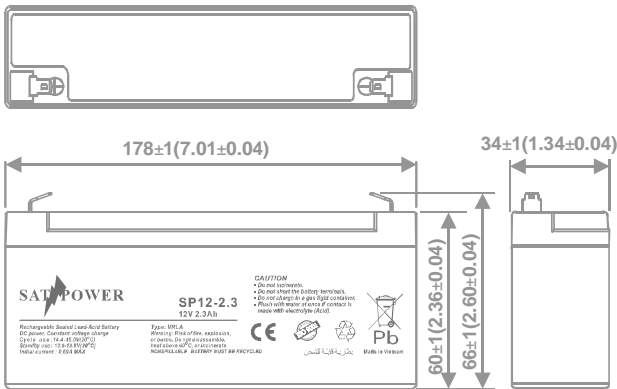
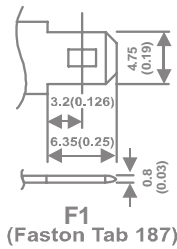




## Dimensions mm(inch)



## SP12-2.3

### Specifications

Nominal Voltage(V) 12V

#### Nominal Capacity

20 hour rate	(0.115A to 10.50V)	2.3Ah
10 hour rate	(0.219A to 10.50V)	2.185Ah
5 hour rate	(0.39A to 10.20V)	1.955Ah
1 C	(2.3A to 9.60V)	1.303Ah
3 C	(6.9A to 9.60V)	0.92Ah

Weight Approx. 1.05kg(2.31Lbs.)

Internal Resistance (at 1KHz) Approx. 37 mΩ

Maximum Discharge Current for 5 seconds: 34.5A

#### Charging Methods at 25 (77 °C)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mv/°C/cell	
Maximum Charging Current :	0.69A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mv/°C/cell	

#### Operating Temperature Range

Charge	-15 (5 °C)	to	40 (104 °C)
Discharge	-15 (5 °C)	to	50 (122 °C)
Storage	-15 (5 °C)	to	40 (104 °C)

#### Charge Retention (shelf life) at 20 (68 °C)

1 month	92%
3 month	90%
6 month	80%

Case Material ABS (UL94 HB)

Terminal F1 (Faston Tab 187)

### Applications

- UPS System
- Alarm Systems & Security equipment
- Telephone & telecom equipment
- Emergency lighting
- Fire & gas detection devices
- Portable measuring instruments
- Medical equipment
- Portable video cameras & television
- Solar systems
- Power tools

**- PERFORMANCE DATA**

**Discharge Rates in Amperes to Various End Voltages at 25 (77 )**

Time	End Voltage	1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	9.08	9.36	9.62	9.82	9.95	10.1	10.4
10	min	4.76	5.45	5.68	5.87	5.94	6.03	6.15
15	min	3.89	4.15	4.27	4.38	4.42	4.47	4.53
30	min	2.02	2.17	2.24	2.30	2.32	2.35	2.39
60	min	1.23	1.34	1.39	1.42	1.43	1.45	1.47
120	min	0.668	0.731	0.765	0.796	0.809	0.826	0.849
180	min	0.508	0.562	0.587	0.609	0.618	0.628	0.643
240	min	0.411	0.449	0.472	0.491	0.497	0.505	0.513
300	min	0.364	0.383	0.396	0.405	0.409	0.414	0.419
600	min	0.217	0.226	0.232	0.237	0.238	0.240	0.242
1200	min	0.114	0.118	0.121	0.123	0.124	0.125	0.126

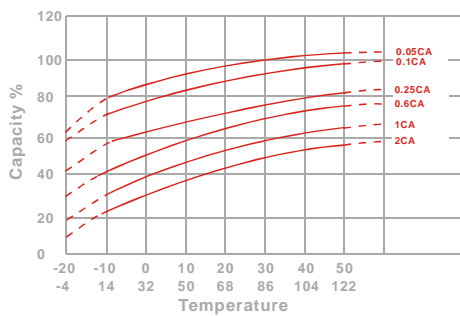
**Discharge Rates in Watts to Various End Voltages at 25 (77 )**

Time	End Voltage	1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	70.8	83.1	91.7	98.1	100	103	107
10	min	46.9	56.3	60.5	63.7	64.9	66.3	68.5
15	min	41.2	47.4	49.7	51.2	51.8	52.5	53.4
30	min	23.7	25.5	26.6	27.5	27.8	28.2	28.7
60	min	13.6	14.7	15.6	16.3	16.5	16.8	17.1
120	min	8.18	9.02	9.37	9.72	9.85	10.0	10.2
180	min	6.47	7.24	7.45	7.60	7.66	7.73	7.82
240	min	5.18	5.76	5.93	6.06	6.11	6.17	6.25
300	min	4.21	4.66	4.85	5.02	5.09	5.15	5.21
600	min	2.49	2.72	2.81	2.88	2.90	2.93	2.96
1200	min	1.38	1.45	1.49	1.52	1.53	1.54	1.55

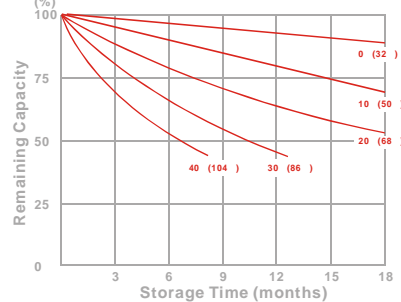
All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%),10min X < 60min(+8%~-8%), X 60min(+5%~-5%)

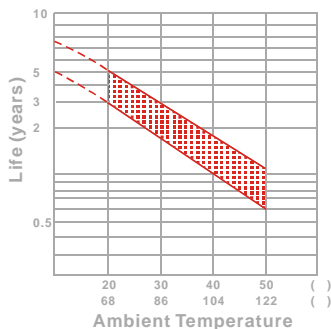
**Effect of Temperature on Capacity 25 (77 )**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

