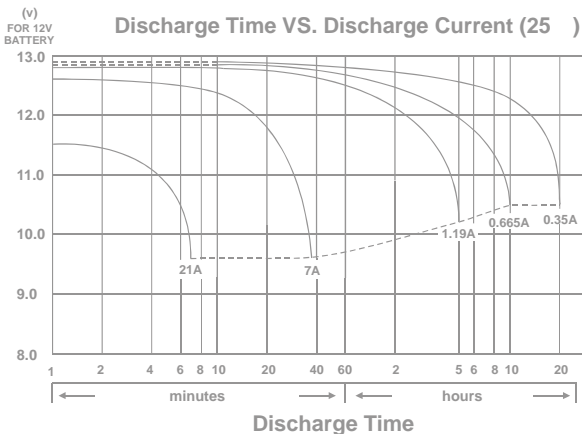
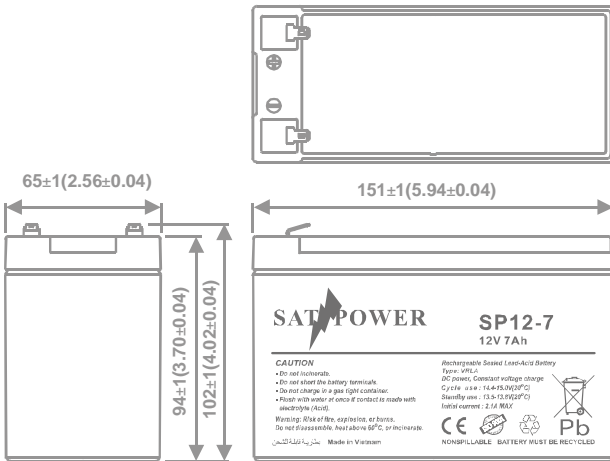
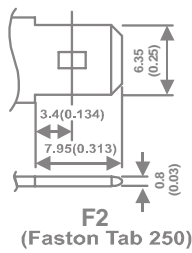




## Dimensions

mm(inch)



## SP12-7

### Specifications

Nominal Voltage(V) 12V

#### Nominal Capacity

20 hour rate	(0.35A	to	10.50V)	7Ah
10 hour rate	(0.665A	to	10.50V)	6.65Ah
5 hour rate	(1.19A	to	10.20V)	5.95Ah
1 C	(7A	to	9.60V)	4.43Ah
3 C	(21A	to	9.60V)	2.8Ah
15min rate	(168W	to	9.6V)	42Wh

Weight Approx. 2.2kg(4.84Lbs.)

Internal Resistance (at 1KHz) Approx. 19 mΩ

#### Maximum Discharge Current for

5 seconds: 105A

#### Charging Methods at 25 °C (77 °F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mv/°C /cell

Maximum Charging Current : 2.1A

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 °F)

Discharge -15 (5 °C) to 50 (122 °F)

Storage -15 (5 °C) to 40 (104 °F)

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

1 month 92%

3 month 90%

6 month 80%

Case Material

ABS

(UL94 HB)

Terminal

F2 (Faston Tab 250)

### 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	23.1	26.2	27.8	29.1	29.6	30.5	31.7
10	min	16.1	17.3	18.1	18.6	18.9	19.2	19.8
15	min	12.6	13.1	13.5	13.8	14.0	14.1	14.3
30	min	6.54	7.05	7.28	7.47	7.56	7.68	7.85
60	min	4.02	4.25	4.41	4.52	4.58	4.63	4.71
120	min	2.26	2.38	2.45	2.49	2.51	2.54	2.57
180	min	1.65	1.74	1.79	1.82	1.83	1.85	1.88
240	min	1.35	1.40	1.44	1.47	1.49	1.51	1.53
300	min	1.10	1.16	1.21	1.25	1.27	1.28	1.29
600	min	0.667	0.675	0.682	0.687	0.690	0.694	0.698
1200	min	0.339	0.346	0.350	0.353	0.355	0.357	0.359

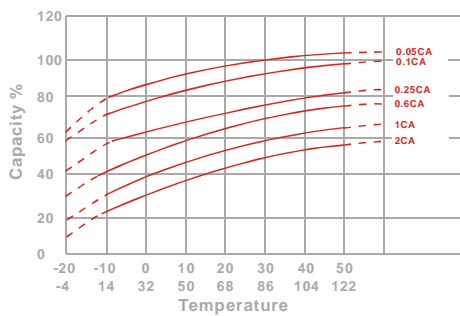
**Discharge Rates in Watts to Various End Voltages at 25 (77 )**

Time	End Voltage	1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	263	282	294	306	311	317	326
10	min	180	191	199	206	209	213	219
15	min	144	151	155	159	161	164	168
30	min	72.4	77.6	81.5	84.6	85.5	86.4	87.5
60	min	46.2	50.3	51.8	53.2	53.8	54.5	55.4
120	min	24.6	27.1	28.3	29.5	29.9	30.4	31.2
180	min	18.5	19.9	20.9	21.7	22.0	22.3	22.8
240	min	17.1	17.6	18.0	18.3	18.4	18.6	18.9
300	min	14.8	15.2	15.5	15.7	15.8	15.9	16.1
600	min	8.16	8.39	8.51	8.59	8.62	8.66	8.72
1200	min	4.14	4.23	4.31	4.37	4.39	4.42	4.46

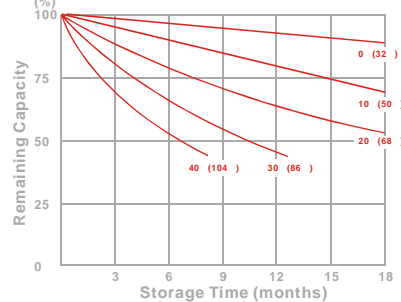
All data on the spec. sheet is an average value:

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

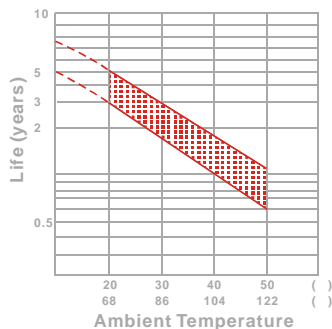
**Effect of Temperature on Capacity 25 (77 )**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

