

SPT6-12_(6V12AH)

Features

Maintenance-free operation
Compact design

Stable quality and high reliability
5 years design time (at 25°C)



Application

- Telecommunication system
- Alarm and security system
- Backup power for testing and measuring instruments
- UPS
- Emergency lighting
- Fire alarm and security systems
- Auto control system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply

Specifications

Nominal Voltage	6V (6 cells)	Operating Temp.Range	Discharge: -15 - 50°C (5 - 122°F)
Nominal Capacity	12AH (20hr, 1.80V/cell, 25°C/76°F)	Nominal Operating Temp.Range	Charge : 0 - 40°C (32 - 104°F)
	11.3AH (10hr, 1.80V/cell, 25°C/77°F)		Storage : -15 - 40°C (5 - 104°F)
	10.2AH (5hr, 1.75V/cell, 25°C/77°F)		25 ± 3°C (77 ± 5°F)
	7.2AH (1hr, 1.60V/cell, 25°C/77°F)		7.2~7.4V (25°C/77°F) Temp.Coefficient -15mV/°C
Dimension	Length 151 ± 2mm	Cycle Use	Initial Charging Current Less than 3.6A
	Width 50 ± 2mm	Standby Use	6.75~6.9V (25°C/77°F) Temp.Coefficient -10mV/°C
	Container Height 94 ± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 100 ± 2mm		40°C (104°F) 103%
Approx Weight	Approx 1.8Kg	Capacity affected by Temperature	25°C (77°F) 100%
Terminal	F1 or F2		0°C (32°F) 86%
Container Material	ABS		Sunstone SPT series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required.
Max. Discharge Current	180A (5S)	Self Discharge	For higher temperatures the time interval will be shorter.
Internal Resistance	Approx 10mΩ		

Constant Current Discharge (Amperes at 25°C/77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	29.69	21.37	17.43	10.87	8.27	6.48	3.90	2.90	2.01	1.15	0.612
1.75V/cell	33.73	24.18	18.90	11.32	8.59	6.81	4.01	3.00	2.06	1.17	0.614
1.70V/cell	36.83	26.08	20.42	11.70	8.87	7.01	4.12	3.07	2.10	1.18	0.617
1.65V/cell	40.08	28.08	21.58	12.34	9.23	7.28	4.24	3.15	2.14	1.19	0.626
1.60V/cell	43.65	30.57	22.57	12.89	9.57	7.45	4.35	3.21	2.18	1.21	0.632

Constant Power Discharge (Watts per cell at 25°C/77°F)

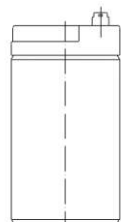
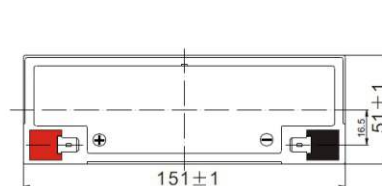
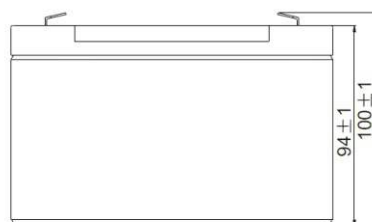
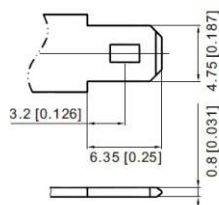
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	55.53	39.16	33.07	20.42	15.72	12.86	7.50	5.67	3.98	2.27	1.19
1.75V/cell	61.38	43.23	34.73	21.25	16.37	13.15	7.70	5.80	4.04	2.30	1.21
1.70V/cell	65.55	45.94	36.54	21.97	16.90	13.33	7.89	5.91	4.08	2.32	1.22
1.65V/cell	71.34	48.55	37.88	23.16	17.39	13.77	8.05	6.02	4.17	2.34	1.23
1.60V/cell	76.83	51.49	39.52	23.88	17.85	14.20	8.21	6.13	4.23	2.35	1.24

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unit mm[inches]

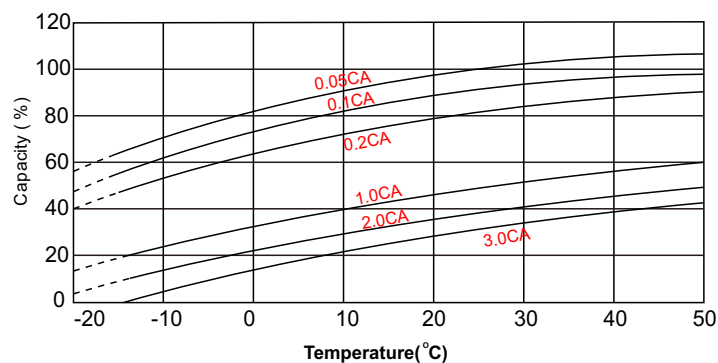
T1 Terminal

Unit: mm [inches]

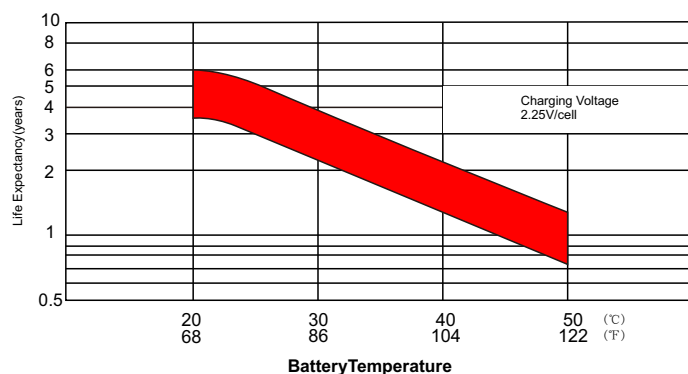


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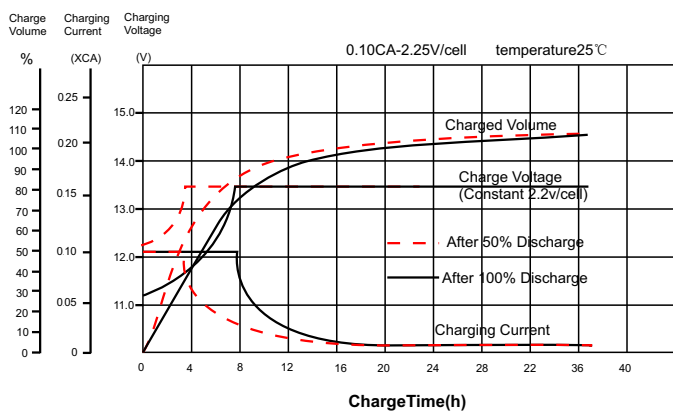
Temperature Effects in Relation to Battery Capacity



Effect of temperature on long term float life

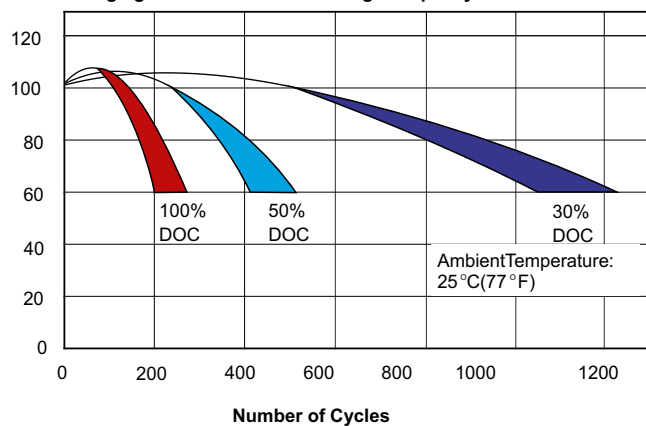


Float charging characteristic

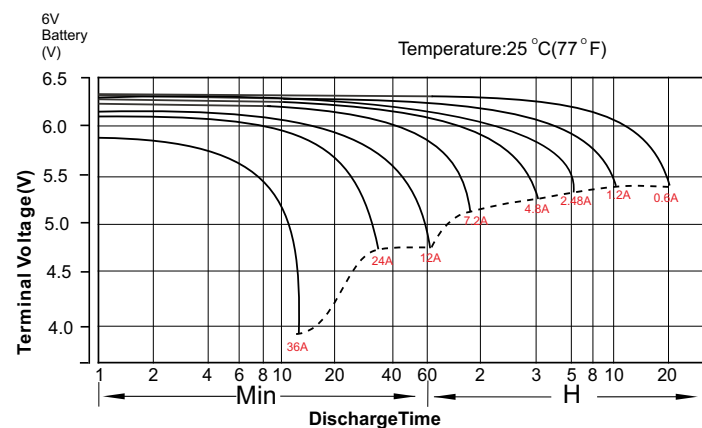


Cycle Life in Relation to Depth of Discharge

Testing condition
Discharging: current 0.17C (FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume: 125% of discharged capacity.



Discharge characteristic Curve



Self Discharge Characteristics

