

## SPT12-12 (12V12AH C20 @25°C)

### Features

- § Maintenance-free operation
- § Compact design
- § ABS case, Flame Retardant V0 is available

- § Stable quality and high reliability
- § 5 years design life (at 25°C)

### Application

- § Telecommunication system
- § Alarm and security system
- § Backup power

- § UPS
- § Emergency lighting
- § Auto control system

- § Electronic apparatus and equipment
- § Communication power supply
- § DC power supply



### Specification

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15-50°C ( 5-122°F )
Nominal Capacity	12.0AH (20hr, 1.80V/cell, 25°C/77°F)		Charge:0-40°C (32-104°F)
	11.4AH (10hr, 1.80V/cell, 25°C/77°F)	Nominal Operating Temp.Range	Storage: -15-40°C (5-104°F)
	10.2AH (5hr, 1.75V/cell, 25°C/77°F)		25 ± 3°C ( 77 ± 5°F)
	7.0AH (1hr, 1.60V/cell, 25°C/77°F)	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
Dimension	Length 151 ± 2mm	Standby Use	Initial Charging Current Less than 3.6A
	Width 98 ± 2mm		13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C
	Container Height 95 ± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 101 ± 2mm	Capacity affected by Temperature	40°C (104°F) 103%
Approx Weight	Approx 3.35Kg		25°C (77°F) 100%
Terminal	F1 or F2		0°C (32°F) 86%
Container Material	ABS	Self Discharge	SPT series batteries may be stored for up to 6 months
Max. Discharge Current	180A (5S)		At 25°C (77°F) and then a freshening charge is required.
Internal Resistance	Approx 16mΩ		For higher temperatures the time interval will be shorter.

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

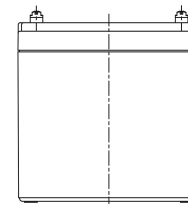
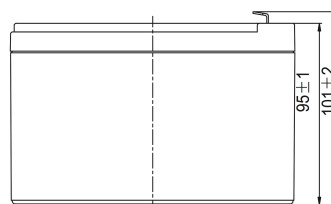
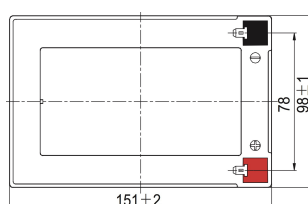
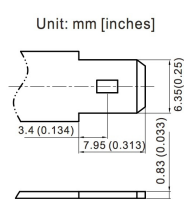
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	29.47	21.21	17.30	10.78	8.21	6.43	3.87	2.88	2.00	1.143	0.608
1.75V/cell	33.48	24.00	18.76	11.23	8.52	6.76	3.98	2.98	2.04	1.164	0.611
1.70V/cell	36.55	25.88	20.27	11.61	8.80	6.95	4.09	3.04	2.08	1.179	0.614
1.65V/cell	39.78	27.87	21.42	12.25	9.17	7.23	4.20	3.13	2.12	1.190	0.623
1.60V/cell	43.33	30.35	22.40	12.80	9.50	7.39	4.32	3.18	2.16	1.202	0.629

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

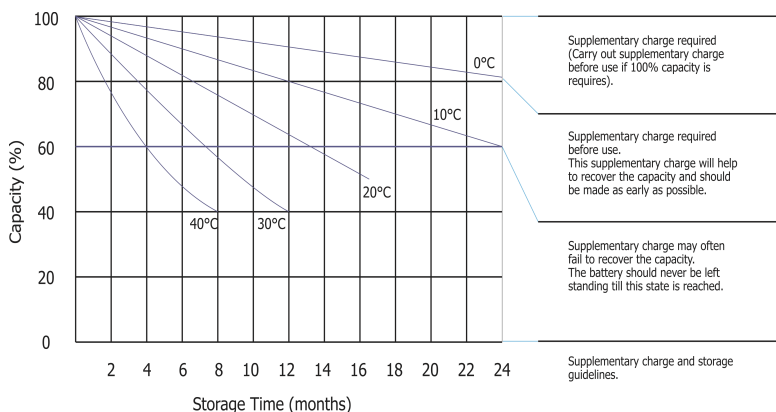
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	55.11	38.87	32.83	20.27	15.60	12.76	7.44	5.63	3.95	2.269	1.181
1.75V/cell	60.93	42.91	34.47	21.09	16.25	13.05	7.65	5.75	4.01	2.298	1.198
1.70V/cell	65.06	45.60	36.26	21.81	16.78	13.23	7.83	5.87	4.05	2.316	1.210
1.65V/cell	70.81	48.19	37.60	22.99	17.26	13.67	7.99	5.97	4.14	2.331	1.222
1.60V/cell	76.26	51.10	39.23	23.70	17.72	14.09	8.15	6.09	4.20	2.348	1.234

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

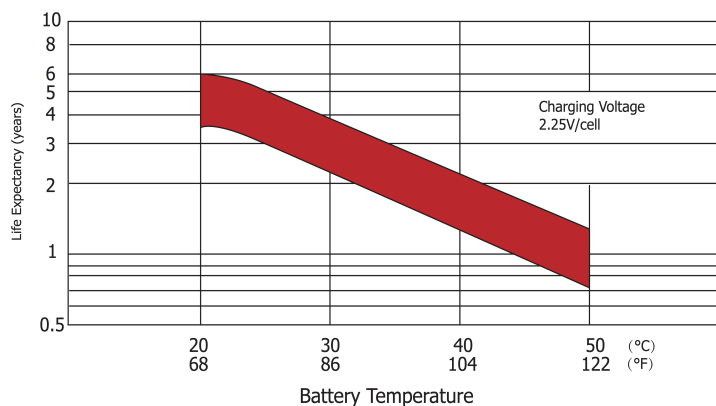
### Dimension



## Storage Characteristics



## Effect Of Temperature On Float Life



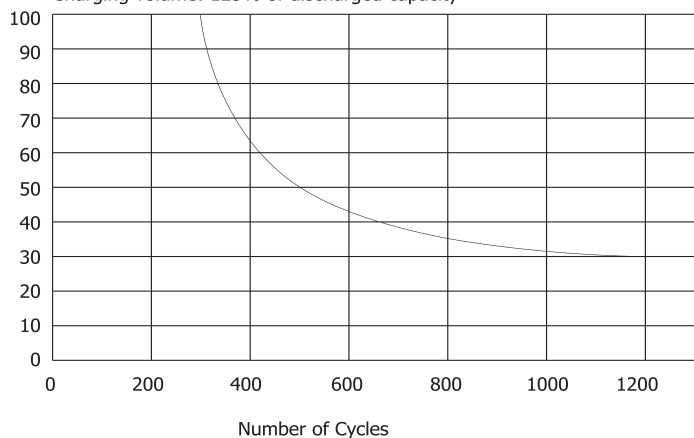
## Cycle Life With Depth Of Discharge (D.O.D.)

Testing condition

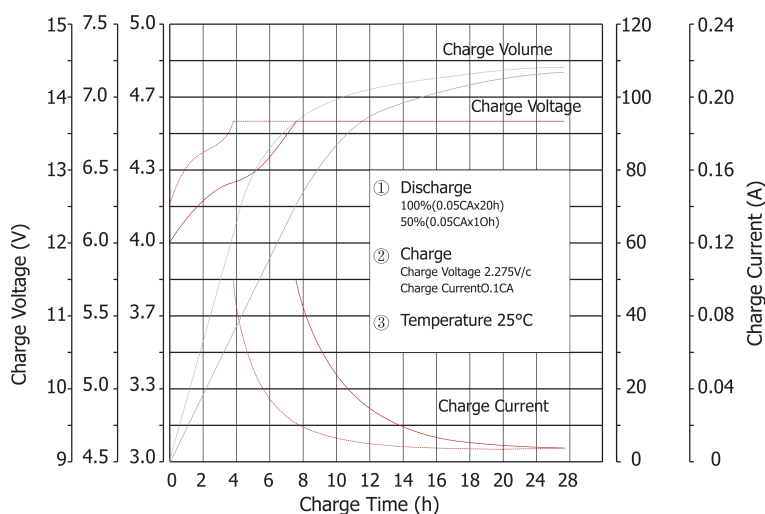
Discharging: current 0.17C (FV 1.7V/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

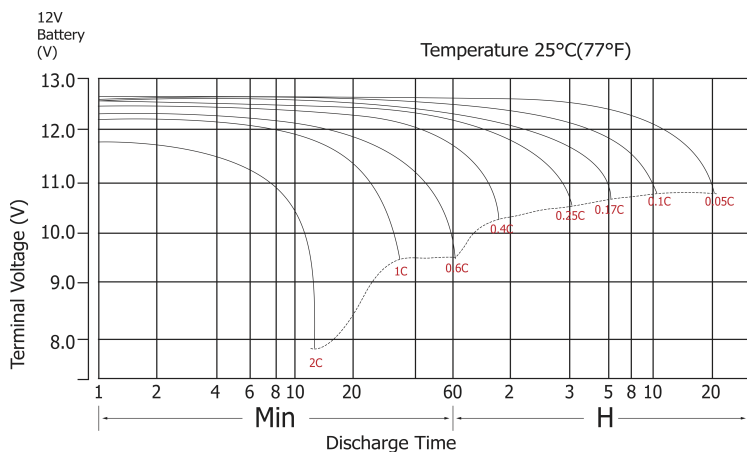
Charging volume: 125% of discharged capacity



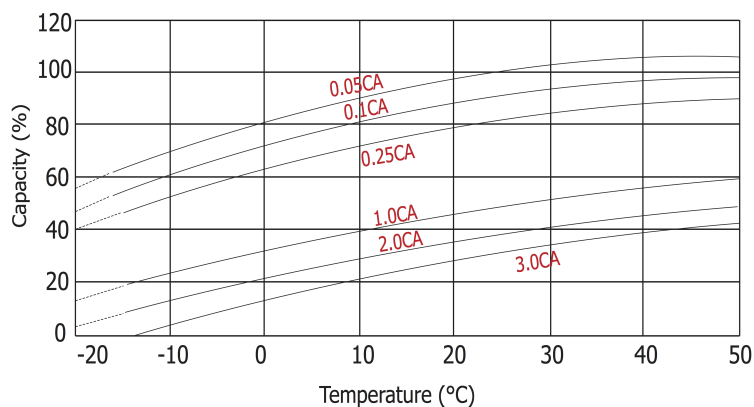
## Charge Characteristics Curve For Standby Use



## Discharge Characteristics Curve



## Temperature Effects With Capacity



## Certificates

