SPT12-5 (12V5AH 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	5.0AH (20hr, 1.80V/cell, 25°C/77°F)		Charge:0-40°C (32-104°F)
	4.7AH (10hr, 1.80V/cell, 25°C/77°F)		Storage: -15-40°C (5-104°F)
	4.25AH (5hr, 1.75V/cell, 25°C/77°F)	Nominal Operating Temp.Range	25 ± 3°C (77 ± 5°F)
	3.0AH (1hr, 1.60V/cell, 25°C/77°F)	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
Dimension	Length 90 ± 2mm		Initial Charging Current Less than 1.5A
	Width 70 ± 2mm	Standby Use	13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C
	Container Height 101 ± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 107 ± 2mm	Capacity affected by Temperature	40°C (104°F) 103%
Approx Weight	Approx 1.54Kg		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	75A (5S)		At 25°C (77°F) and then a freshening charge is required.
Internal Resistance	Approx 32mΩ		For higher temperatures the time interval will be shorter.

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

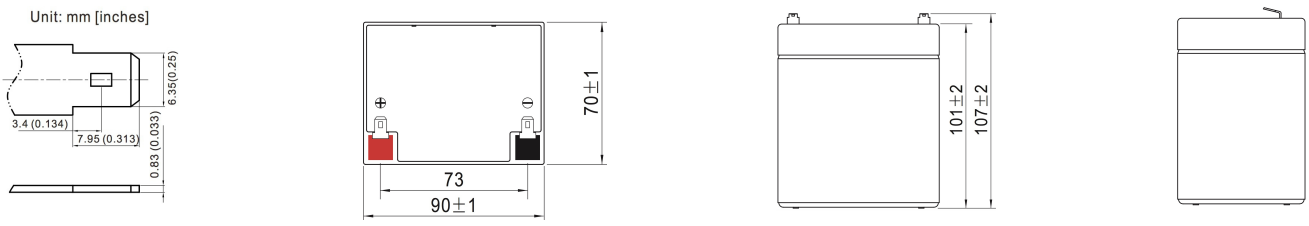
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	12.37	8.91	7.26	4.53	3.45	2.70	1.62	1.21	0.84	0.477	0.256
1.75V/cell	14.05	10.07	7.88	4.72	3.58	2.84	1.67	1.25	0.86	0.486	0.259
1.70V/cell	15.34	10.87	8.51	4.88	3.69	2.92	1.72	1.28	0.87	0.492	0.263
1.65V/cell	16.70	11.70	8.99	5.14	3.85	3.03	1.76	1.31	0.89	0.497	0.266
1.60V/cell	18.19	12.74	9.40	5.37	3.99	3.10	1.81	1.34	0.91	0.502	0.267

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	23.14	16.32	13.78	8.51	6.55	5.36	3.13	2.36	1.66	0.948	0.495
1.75V/cell	25.58	18.01	14.47	8.85	6.82	5.48	3.21	2.41	1.68	0.960	0.502
1.70V/cell	27.31	19.14	15.22	9.15	7.04	5.55	3.29	2.46	1.70	0.967	0.509
1.65V/cell	29.72	20.23	15.79	9.65	7.25	5.74	3.36	2.51	1.74	0.974	0.518
1.60V/cell	32.01	21.45	16.47	9.95	7.44	5.92	3.42	2.55	1.76	0.981	0.524

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

Dimension

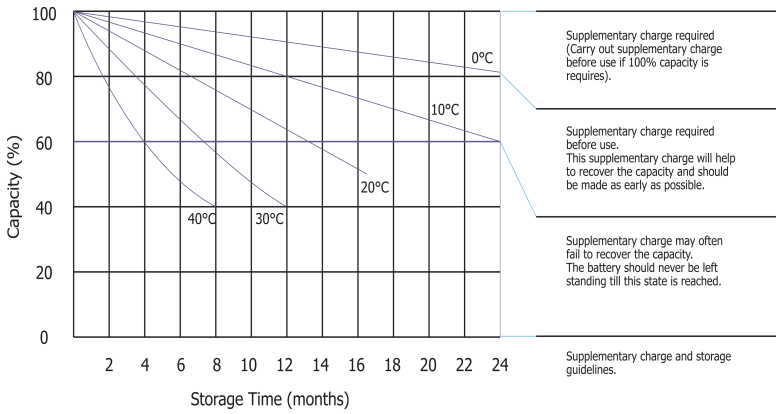


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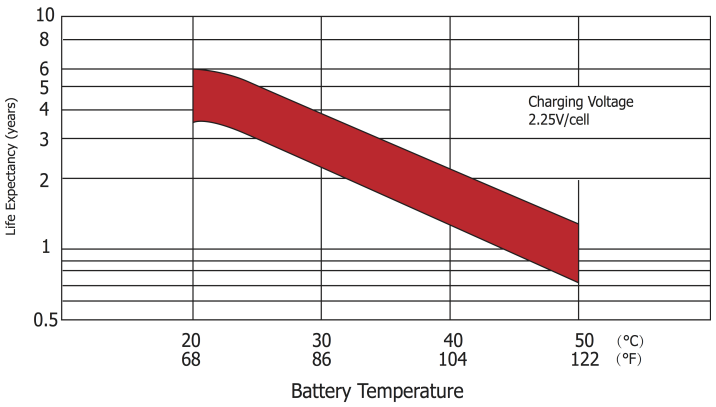
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Storage Characteristics

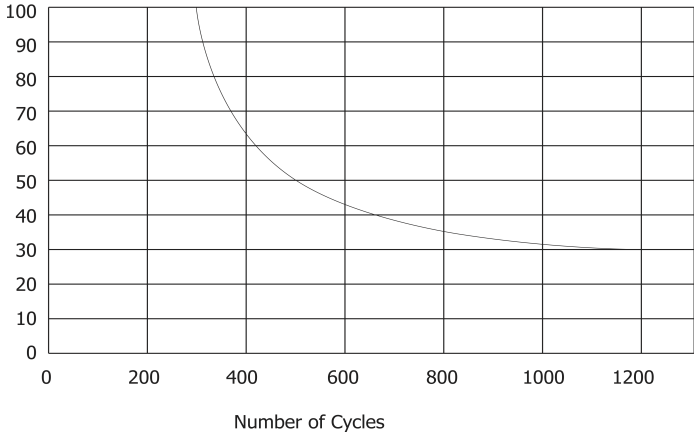


Effect Of Temperature On Float Life

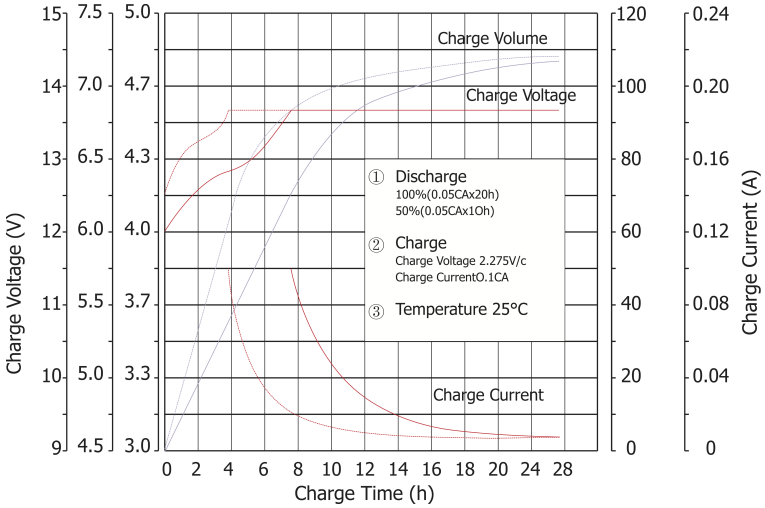


Cycle Life With Depth Of Discharge (D.O.D.)

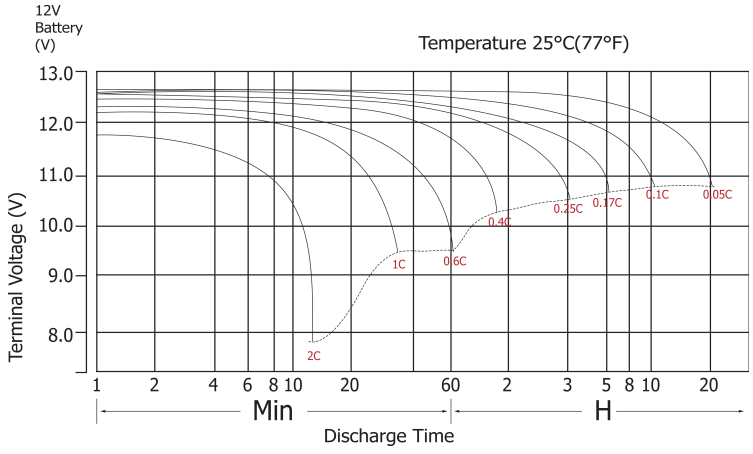
Testing condition
Discharging: current 0.17C (FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume: 125% of discharged capacity



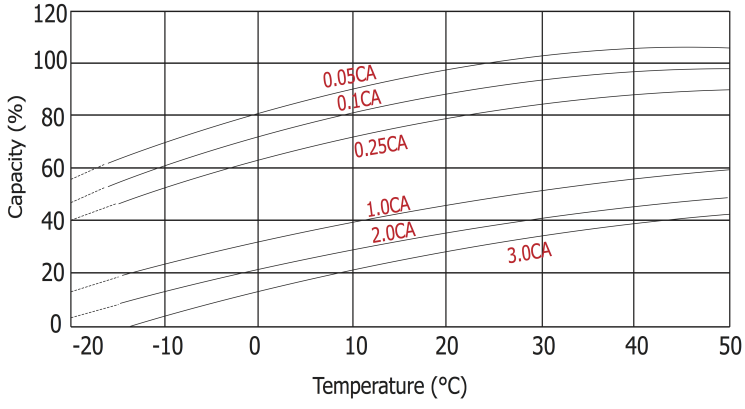
Charge Characteristics Curve For Standby Use



Discharge Characteristics Curve



Temperature Effects With Capacity



Certificates

ISO 14001 CERTIFIED

ISO 9001 CERTIFIED

MH20942

IEC

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