

# 6-SPB Series

## Spiral Pure Lead Battery

### 6-SPB-40



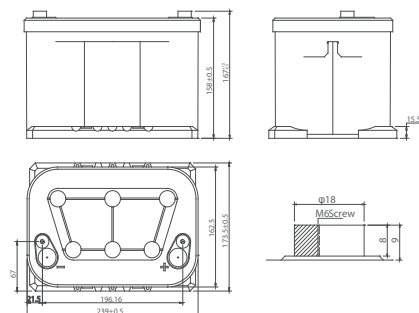
### Main Applications

- ▶ UPS
- ▶ Communication station
- ▶ Solar energy storage
- ▶ Smart grid
- ▶ Diferent standby power supply

### Benefits

- ▶ Applicable in -45°C ~ 75°C
- ▶ The cycle life of 100% DOD reaches more than 350 times
- ▶ The designed float life is 15 years
- ▶ The time of high rate discharge is two times more than ordinary battery

### Dimensions



### Certification

- ISO 9001
- ISO 14001
- ISO 18001

### Technical Parameters

Nominal Voltage	12 V
Capacity	40 Ah @ 10hr to 1.80 V per cell @ 25°C (77°F)
Weight	15 kg (33.07 lbs)
Dimensions	Length:239 mm (9.41 in) Width:173.5 mm (6.83 in) Height: 158 mm (6.22 in) Total height:167 mm (6.57 in)
Internal Resistance (full charged)	3.0 m $\Omega$
Short- circuit Current	1855 A
Self Discharge @25°C(77°F)	Less than 8% after 90 days storage
Operating Temperature Range	Discharge: -45°C ~ 75°C (-49°F ~ 167°F) Charge: -20°C ~ 50°C (-4°F ~ 122°F) Storage: -20°C ~ 40°C (-4°F ~ 104°F)
Recommended Operating Temperature	15°C ~ 35°C
Recommended Charging Current	4 A~16 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell, Temps coefficient -3mV/ cell·°C Cycle: 2.40 V/cell
Terminal	M6
Capacity Affected by Temperature(C <sub>10</sub> )	105% @ 40°C(104°F) 95% @ 0°C(32°F) 80% @ -20°C(-4°F)

### Technical Features

- ▶ With ultra-thin high purity lead frame design, a higher charge efficiency with trickle current is achieved
- ▶ With unique spiral wound design, the dehydration and bulging deformation of the battery are avoided in high-temperature
- ▶ Excellent fast charging performance, more than 95% of electricity is gained within 40 minutes
- ▶ Good battery consistency, available more strings in parallel

# 6-SPB Series

## Spiral Pure Lead Battery

### 6-SPB-40



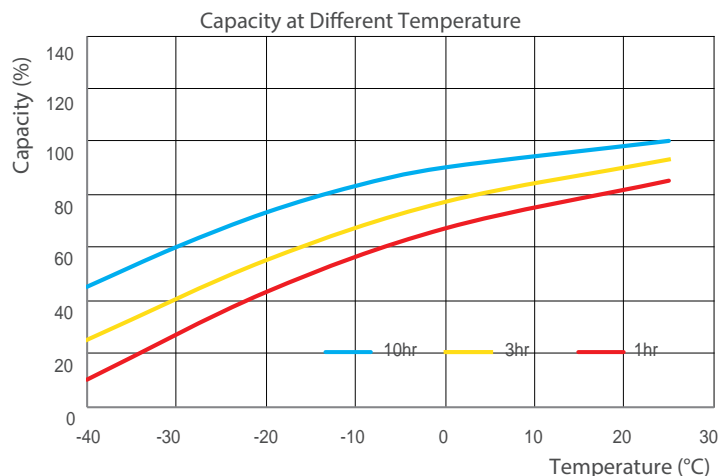
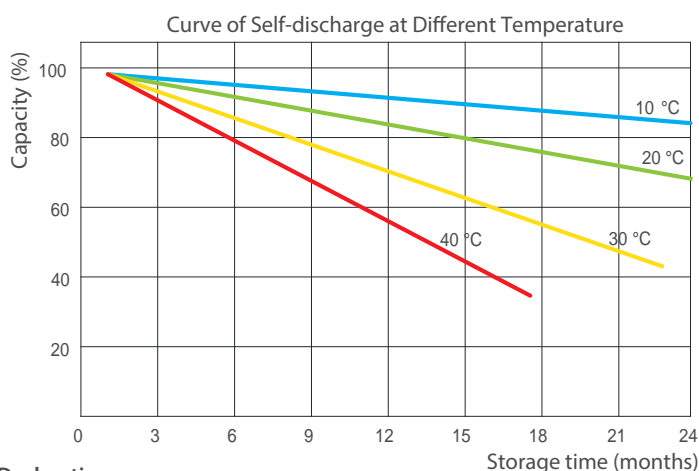
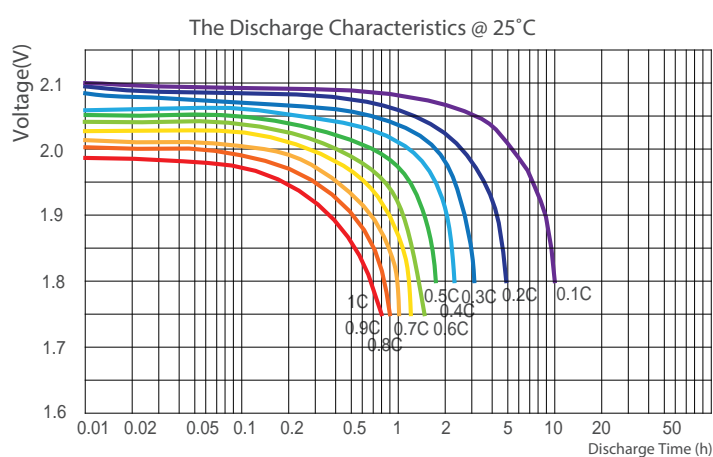
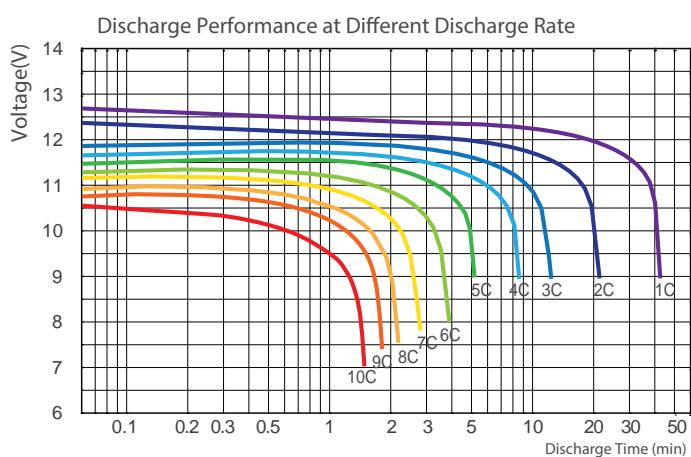
#### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	2min	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr
1.85V	208.0	150.9	101.3	78.4	66.1	50.8	35.6	29.1	16.8	11.0	7.8	6.5
1.75V	282.7	189.9	122.7	95.7	71.3	53.0	37.6	30.7	17.2	11.9	9.0	7.0
1.65V	329.6	208.0	132.3	98.7	75.3	56.1	39.3	31.2	17.5	12.2	9.1	7.1

#### Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	2min	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr
1.85V	386.7	288.9	200.0	152.0	130.7	94.3	70.2	59.1	32.7	21.5	15.4	12.8
1.75V	488.9	348.9	239.1	177.8	146.7	103.2	75.6	60.4	32.8	23.1	17.5	13.9
1.65V	564.4	382.2	244.2	182.2	149.3	105.7	76.4	61.3	33.1	23.6	17.7	14.0

#### Performance curve



#### \*Declaration:

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

Welcome to Visit : [www.chinashoto.com](http://www.chinashoto.com)