

## SC12-7

12V7Ah(20hr)

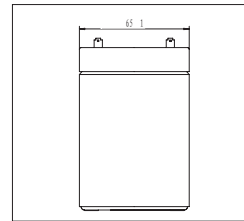
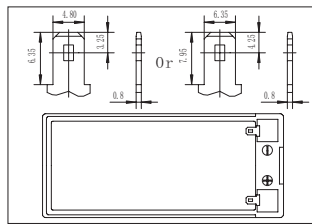
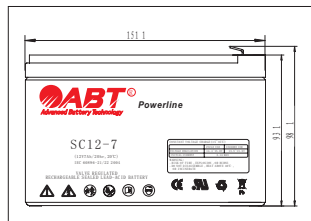
ABT Powerline SC Series is a Standard Commercial battery according to Eurobat Classification with 5 years design life for standby application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.



### Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	7Ah @20hr-rate to 1.75V Per cell 6.51Ah @10hr-rate to 1.75V Per cell 4.41Ah @1hr-rate to 1.60V Per cell
Weight	Approx. 2.4kg(5.29lb)
Maximum Discharge Current	91A(5s)
Short circuit current	444A
Maximum charge current	2.1A(30% of rated capacity)
Internal Resistance	Approx 27 mOhms
Mass Energy(Wh/kg)	35.00
Volumic Energy(Wh/L)	92.03
Operating Temperature Range	Discharge -20~60°C; Charge -10~60°C; Storage -20~60°C
Nominal Operating Temperature Range	20°C±3°C(68°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 20°C(68°F)
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 20°C(68°F)
Self Discharge	ABT batteries can be stored for more than 6 months at 20°C(68°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Faston F1 or F2
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.

### Dimensions / Terminal



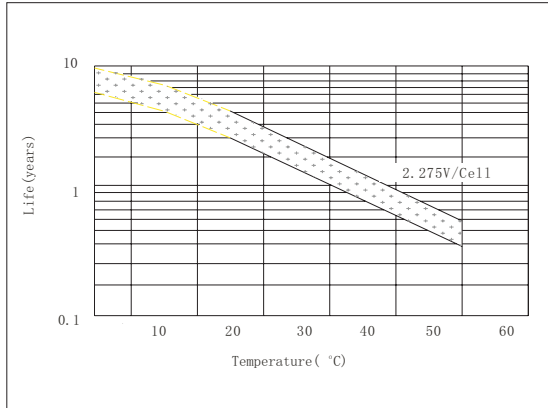
### Constant Current Discharge Data (Amperes at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	26.12	17.41	12.67	7.651	4.410	2.720	1.898	1.482	1.211	0.843	0.667	0.356
1.65V	24.90	16.74	12.34	7.510	4.359	2.684	1.881	1.473	1.197	0.834	0.661	0.352
1.70V	23.84	16.20	12.06	7.400	4.296	2.643	1.865	1.464	1.188	0.825	0.655	0.351
1.75V	22.47	15.56	11.82	7.280	4.229	2.600	1.851	1.454	1.180	0.816	0.651	0.350
1.80V	20.99	14.91	11.61	7.160	4.170	2.558	1.838	1.448	1.168	0.807	0.644	0.344

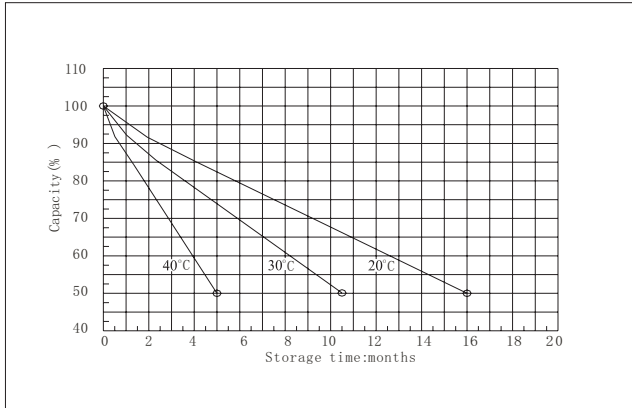
### Constant Power Discharge Data (Watts per cell at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	41.81	27.95	21.36	13.12	7.772	4.601	3.237	2.528	2.085	1.404	1.145	0.605
1.65V	40.12	27.05	20.76	12.80	7.669	4.536	3.200	2.505	2.072	1.392	1.139	0.598
1.70V	38.45	26.06	20.15	12.55	7.573	4.479	3.164	2.485	2.060	1.381	1.132	0.594
1.75V	36.30	25.00	19.59	12.29	7.499	4.419	3.132	2.469	2.048	1.369	1.123	0.588
1.80V	33.99	23.97	19.12	12.08	7.390	4.356	3.102	2.450	2.039	1.358	1.116	0.583

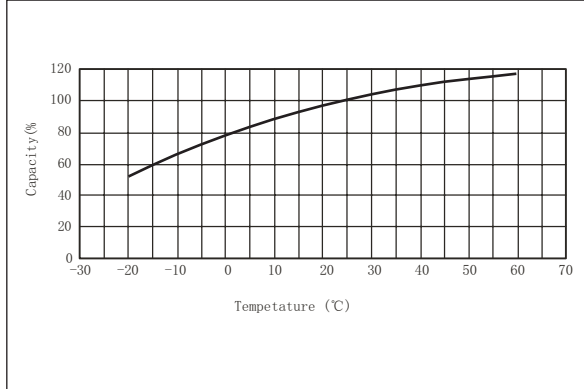
### Trickle (or float) Service Life



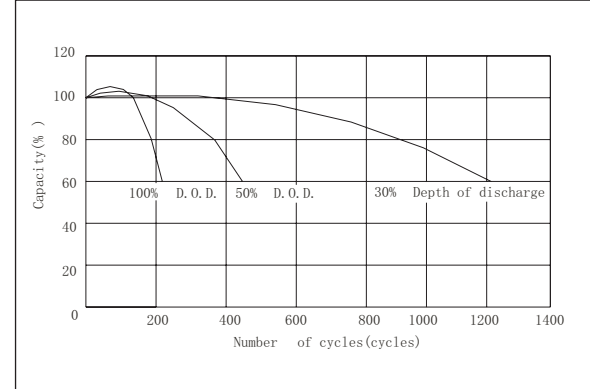
### Capacity Retention Characteristic



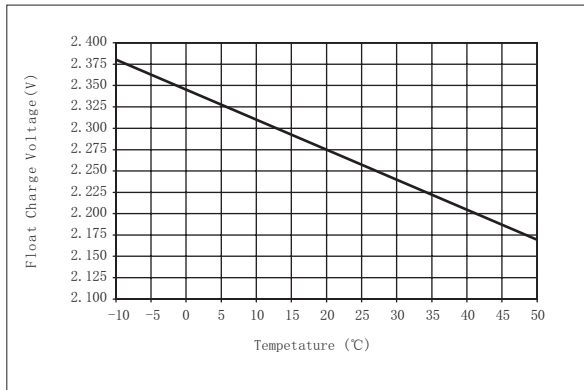
### Capacity and Temperature



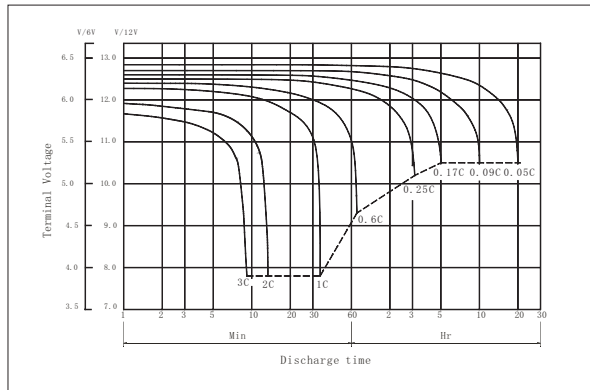
### Cycle Service Life



### Float Charge Voltage and Temperature



### Terminal Voltage (V) and Discharge Time(20°C68°F)



### Charging Procedures

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Ranges	
Cycle Use	20°C(68°F)	2.45	2.40~2.50	0.3C
Standby	20°C(68°F)	2.275	2.25~2.30	0.3C

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.40
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

### Contact information

Shandong Sacred Sun Power Sources Co., Ltd.  
Add: 1, Shengyang Road, Qufu 273100 Shandong, China  
Tel: +86-537-4438 666 extn 6028 Fax: +86-537-4411 936  
Website: <http://www.abtbatt.com> E-mail: [sales@abtbatt.com](mailto:sales@abtbatt.com)

ABT VRLA Battery: Available Power Range From 7Ah to 3000Ah

Copyright SACREDSUN,  
All rights reserved.  
(Edition: May. 2011)