



Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	4.5Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.35 Kg (Tolerance $\pm 4.0\%$)
Internal Resistance	Approx. 38 m Ω
Terminal	F1/F2
Max. Discharge Current	45A (5 sec)
Short Circuit Current	234A
Design Life	6~8 years (Float charging)
Recommended Maximum Charging Current	1.35 A
Reference Capacity	C3 3.49AH C5 3.94AH C10 4.23AH C20 4.54AH
Standby Use Voltage	13.7 V~13.9 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C $\pm 5^\circ\text{C}$
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

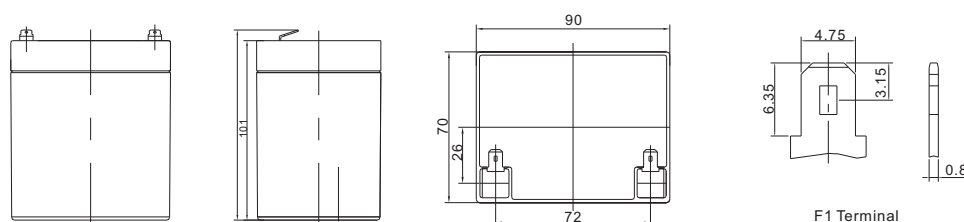
BR-12V4.5 AGM



A general purpose battery with 6~8 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the RT series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/ EPS, Telecom, power grid, medical equipment, emergency light and security system applications.



Dimensions



Length	90 ± 1.5 mm (3.54 inches)
Width	70 ± 1.5 mm (2.76 inches)
Height	101 ± 1.5 mm (3.98 inches)
Total Height	106 ± 1.5 mm (4.17 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A (25°C)

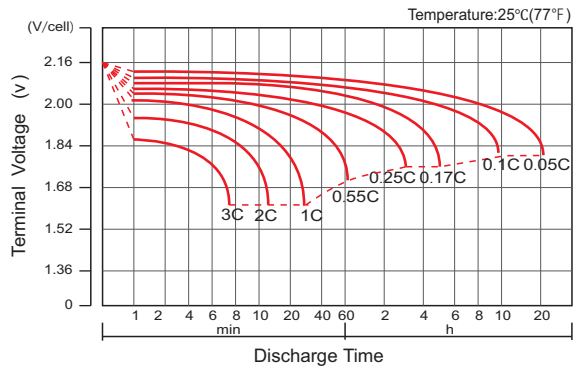
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	17.31	11.40	8.498	4.918	2.870	1.694	1.231	0.980	0.828	0.553	0.450	0.234
1.65V	16.68	11.06	8.276	4.810	2.817	1.669	1.215	0.968	0.818	0.547	0.446	0.232
1.70V	15.87	10.62	7.983	4.667	2.747	1.636	1.193	0.952	0.805	0.540	0.440	0.230
1.75V	14.82	10.04	7.602	4.480	2.654	1.592	1.164	0.930	0.788	0.530	0.433	0.227
1.80V	13.51	9.304	7.111	4.238	2.533	1.535	1.126	0.902	0.766	0.517	0.423	0.222
1.85V	11.88	8.382	6.492	3.929	2.378	1.460	1.076	0.865	0.737	0.500	0.409	0.216

Constant Power Discharge Characteristics : WPC (25°C)

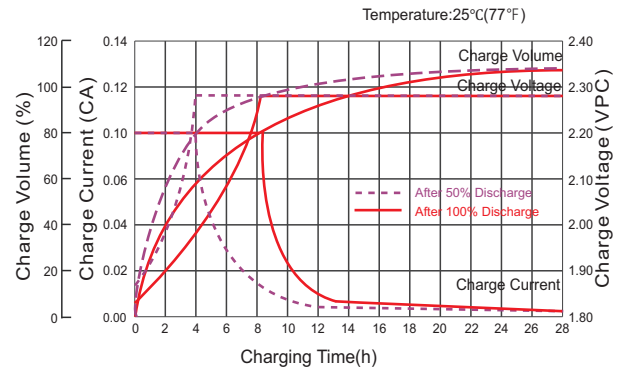
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	29.79	19.67	15.08	9.07	5.45	3.26	2.39	1.91	1.62	1.10	0.90	0.47
1.65V	29.47	19.59	14.99	9.00	5.40	3.23	2.37	1.90	1.61	1.09	0.89	0.47
1.70V	28.35	19.01	14.59	8.78	5.29	3.18	2.33	1.87	1.59	1.08	0.88	0.46
1.75V	26.96	18.31	14.09	8.52	5.13	3.11	2.29	1.83	1.56	1.06	0.87	0.45
1.80V	24.99	17.26	13.37	8.14	4.92	3.01	2.22	1.78	1.52	1.03	0.85	0.45
1.85V	22.38	15.82	12.38	7.62	4.65	2.88	2.13	1.72	1.47	1.00	0.82	0.44

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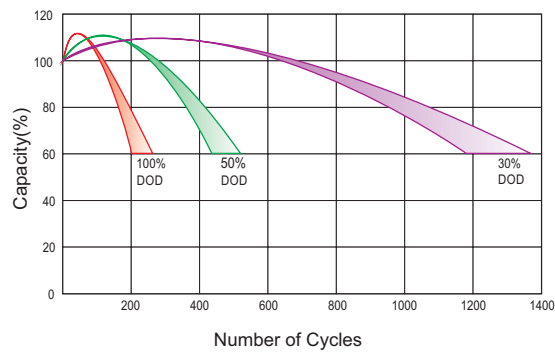
Discharge Characteristics Curve



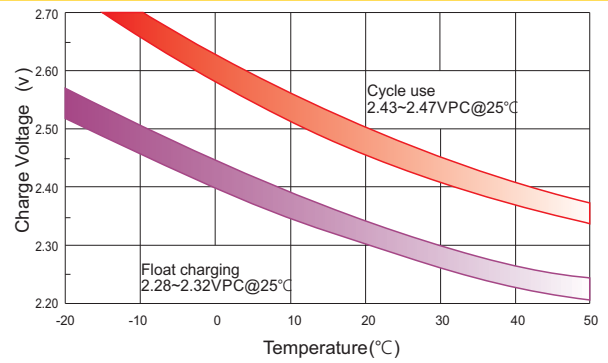
Charge Characteristic Curve For Standby Use



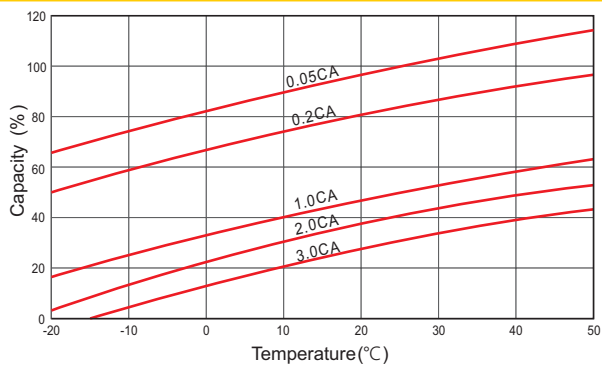
Cycle Life In Relation To Depth Of Discharge



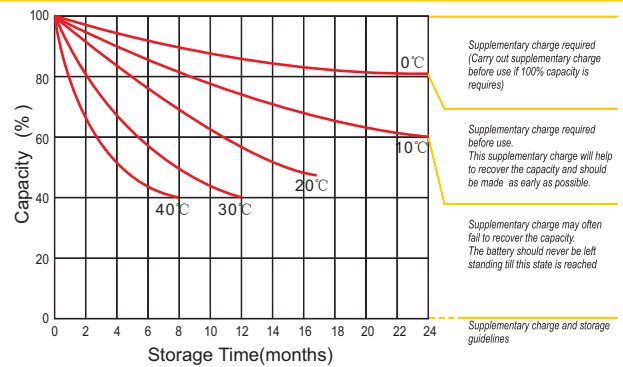
Relationship Between Charging Voltage And Temperature



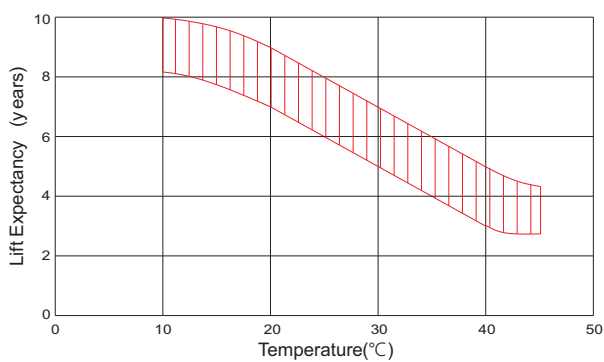
Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

