

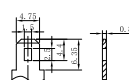
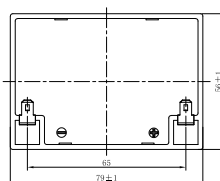
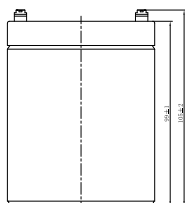
VALVE REGULATED LEAD ACID AGM BATTERY

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	2.9Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 1.10 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 50 mΩ
Terminal	T1
Max. Discharge Current	44A (5 sec)
Design Life	5 years (floating charge)
Max. Charging Current	0.87 A
Reference Capacity	C3 2.13AH C5 2.44AH C10 2.70AH C20 2.90AH
Float Charging Voltage	13.5 V~13.8V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4 V~15.0 V @ 25°C Temperature Compensation: -5mV/°C/Cell
Operating Temperature Range	Discharge: -15°C~50°C Charge: -20°C~40°C Storage: -15°C~40°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	AMP-Tech Plus (VRLA) batteries can be stored for up to 6 months at 25°C then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions



T1 Terminal

Length	79±2mm (3.11 inches)
Width	56±2mm (2.20 inches)
Height	99±2mm (3.90 inches)
Total Height	105±2mm (4.13 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	20MIN	30MIN	45MIN	1HR	1.5HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.85V/cell	8.14	5.26	4.11	3.44	2.61	1.96	1.59	1.24	0.938	0.687	0.565	0.474	0.410	0.317	0.264	0.142
1.80V/cell	8.75	5.58	4.31	3.58	2.69	2.01	1.63	1.27	0.955	0.699	0.573	0.481	0.416	0.321	0.267	0.143
1.75V/cell	9.22	5.80	4.46	3.68	2.76	2.06	1.66	1.29	0.973	0.710	0.581	0.487	0.421	0.325	0.270	0.145
1.70V/cell	9.66	6.04	4.60	3.79	2.83	2.10	1.70	1.31	0.987	0.720	0.589	0.494	0.426	0.328	0.273	0.146
1.67V/cell	10.0	6.21	4.72	3.86	2.88	2.14	1.72	1.33	1.00	0.727	0.595	0.498	0.430	0.331	0.275	0.147
1.60V/cell	10.6	6.47	4.88	3.98	2.96	2.19	1.76	1.36	1.02	0.741	0.605	0.506	0.436	0.336	0.278	0.149

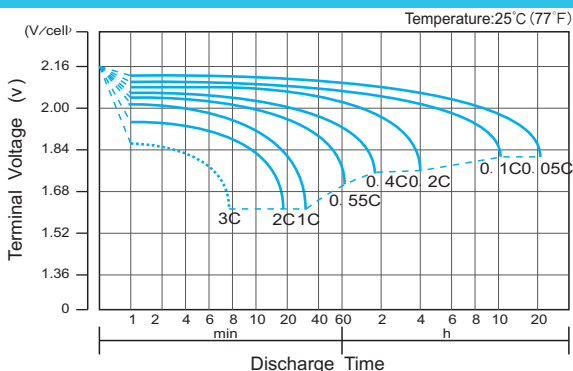
Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	5MIN	10MIN	15MIN	20MIN	30MIN	45MIN	1HR	1.5HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.85V/cell	15.4	10.0	7.87	6.63	5.05	3.80	3.10	2.42	1.84	1.35	1.11	0.936	0.811	0.628	0.524	0.284
1.80V/cell	16.4	10.5	8.21	6.86	5.18	3.89	3.16	2.47	1.87	1.37	1.13	0.948	0.822	0.637	0.531	0.287
1.75V/cell	17.1	10.9	8.43	7.01	5.29	3.96	3.22	2.51	1.89	1.39	1.14	0.959	0.831	0.643	0.536	0.290
1.70V/cell	17.7	11.3	8.66	7.18	5.40	4.04	3.26	2.54	1.92	1.41	1.15	0.971	0.839	0.649	0.541	0.292
1.67V/cell	18.2	11.5	8.84	7.31	5.48	4.09	3.31	2.57	1.94	1.42	1.16	0.978	0.846	0.654	0.544	0.295
1.60V/cell	18.9	11.8	9.08	7.49	5.60	4.16	3.37	2.61	1.97	1.44	1.18	0.991	0.856	0.663	0.551	0.298

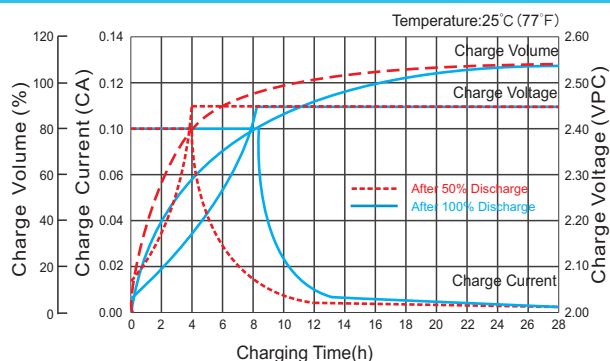
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

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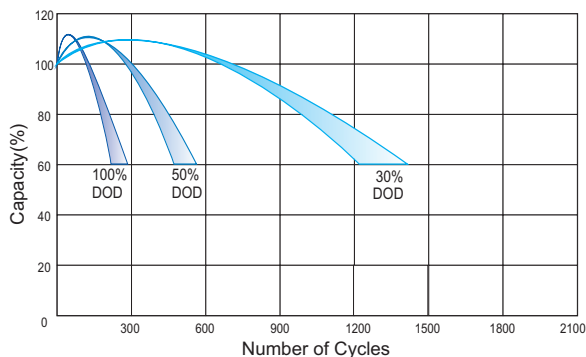
Discharge Characteristics Curve



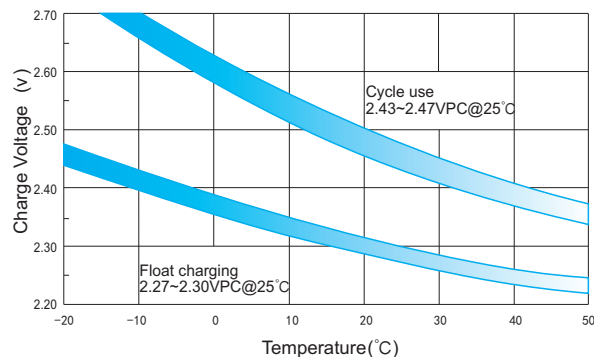
Charge Characteristic Curve for Cycle Use(IU)



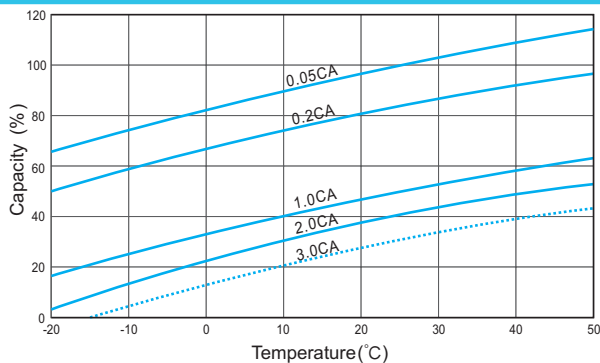
Cycle Life in Relation to Depth of Discharge



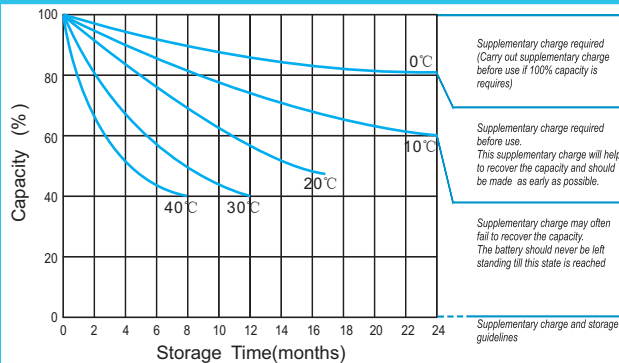
Relationship Between Charging Voltage and Temperature



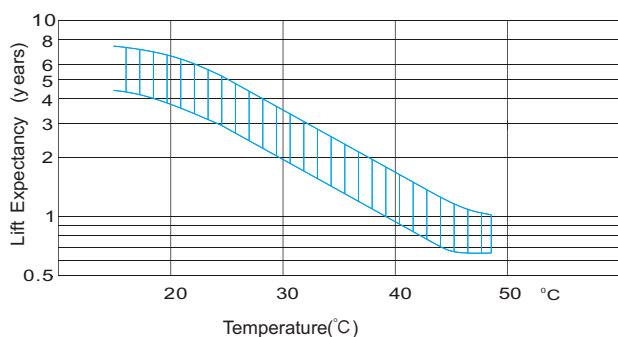
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

