AVACOM
BATTERIES
& CHARGERS

Valve Regulated Lead Acid Battery

PBAV-12V045-M6AD

8591849088530

SPECIFICATIONS

Deep Cycle Series

Nominal Voltage(V)		
12V		

Nominal Capacity		
20 hour rate	(2.25A to 10.50V)	45Ah
10 hour rate	(4.275A to 10.50V)	42.75Ah
5 hour rate	(7.65A to 10.20V)	38.25Ah
1 C	(45A to 9.60V)	25.5Ah
3 C	(135A to 9.60V)	18Ah

Weight

Approx. 13.4kg

Internal Resistance (at 1KHz)

Approx. 7 mΩ

Maximum Discharge Current for

5 seconds: 540A

Charging Methods at 25°C	
Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current:	13.5A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mV/°C/cell	

Operating Temperature Range	
Charge	-15°C to 40°C
Discharge	-15°C to 50°C
Storage	-15°C to 40°C

Charge Retention (shelf life) at 20°C	
1 month	92%
3 month	90%
6 month	80%

Case Material

ABS UL94 HB

Design Life

3-5 Years.

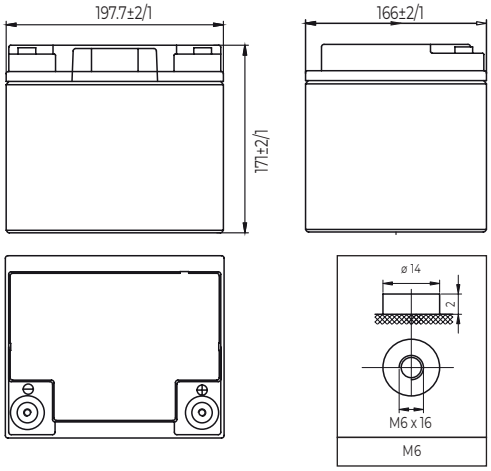
Terminal

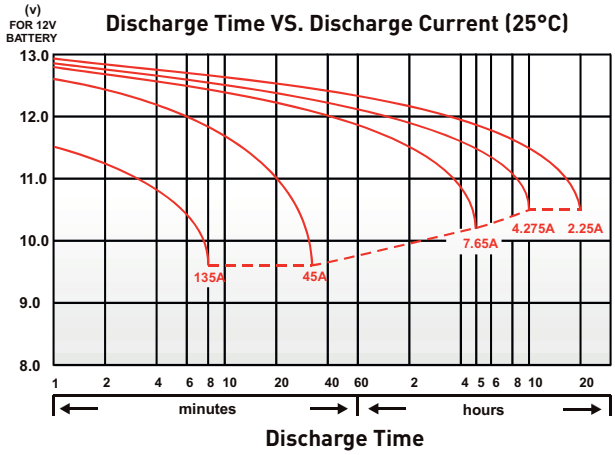
F8



DIMENSIONS

Length (L)	197.7±2 1 mm
Width (W)	166±2 1 mm
Height (H)	171±2 1 mm
Overall Height (HT)	171±2 1 mm





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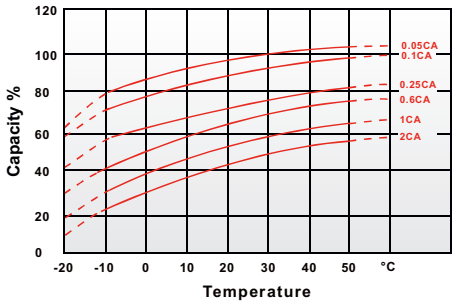
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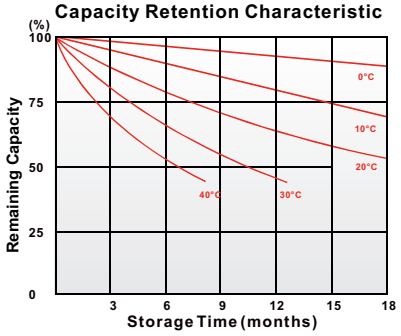
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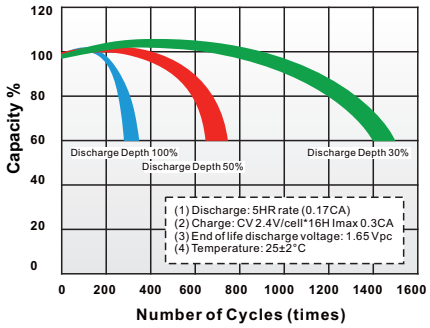
Effect of Temperature on Capacity 25°C



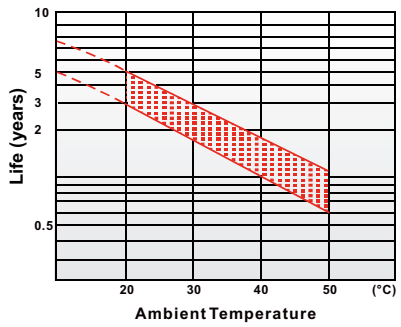
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
6	min	250	267	282	291	294	297	300
8	min	206	219	232	238	241	243	245
10	min	179	190	199	204	206	208	210
15	min	136	143	150	153	155	156	157
20	min	113	119	124	126	127	128	129
30	min	85.2	89.0	92.3	94.0	94.9	95.5	96.0
60	min	63.2	65.6	66.9	67.4	67.7	68.0	68.2
90	min	43.7	45.4	46.2	46.5	46.7	46.9	47.1
120	min	33.7	35.0	35.6	35.8	36.0	36.2	36.3
180	min	23.4	24.2	24.6	24.8	24.9	25.0	25.0
240	min	18.1	18.7	19.0	19.1	19.2	19.3	19.3
300	min	14.7	15.3	15.5	15.6	15.7	15.8	15.8
480	min	9.61	9.93	10.1	10.2	10.2	10.3	10.3
600	min	6.96	7.19	7.39	7.59	7.71	7.81	7.91
1200	min	3.57	3.77	3.95	4.10	4.19	4.28	4.37

Discharge Rates in Amperes to Various End Voltages at 25°C

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
6	min	142	151	160	165	167	169	170
8	min	115	122	129	133	134	135	136
10	min	97.5	104	109	112	113	114	115
15	min	72.5	76.5	80.0	81.8	82.6	83.4	83.9
20	min	58.8	61.7	64.3	65.7	66.2	66.7	67.2
30	min	43.7	45.7	47.3	48.2	48.6	48.9	49.2
60	min	31.9	33.1	33.8	34.0	34.2	34.3	34.4
90	min	22.0	22.8	23.2	23.4	23.5	23.6	23.7
120	min	16.9	17.6	17.9	18.0	18.1	18.2	18.2
180	min	11.7	12.1	12.3	12.4	12.5	12.6	12.6
240	min	8.98	9.30	9.45	9.52	9.56	9.59	9.62
300	min	7.33	7.58	7.70	7.76	7.79	7.82	7.84
480	min	4.77	4.93	5.00	5.04	5.06	5.08	5.09
600	min	3.93	4.08	4.275	4.22	4.23	4.23	4.24
1200	min	2.08	2.19	2.25	2.28	2.31	2.33	2.35

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