



**AGM Battery  
(12V18AH)**
**B00427/BAT-AGM-18A**
**Applications**

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Portable apparatus, lights and instruments
- Electric toys
- Illumination light
- Fire alarms
- Portable power
- Wheelchairs
- Medical equipment

<b>Specification</b>	
Nominal voltage	12V
Nominal capacity (20h)	18 Ah
Dimensions	Length : 181.5 ± 2 mm (7.16 inches) Width : 77 ± 1 mm (3.03 inches) Container height : 167.5 ± 2 mm (6.59 inches) Total height (with terminal) : 167.5 ± 2 mm (6.59 inches)
Weight	Approx. 6 kg (13.23 lb)
Terminal	T3
Container material	ABS
Rated capacity	19.3 Ah/0.965 A (20h, 1.80V/cell, 25°C/77°F) 18.0 Ah/1.80 A (10h, 1.80V/cell, 25°C/77°F) 15.8 Ah/3.16 A (5h, 1.75V/cell, 25°C/77°F) 14.3 Ah/4.77 A (3h, 1.75V/cell, 25°C/77°F) 11.6 Ah/11.6 A (1h, 1.60V/cell, 25°C/77°F)
Max. discharge current	270 A (5s)
Internal resistance	Approx. 15 mΩ
Operating temperature range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)
Nominal operating temp. range	25 ± 3°C (77 ± 5°F)
Cycle use	Initial charging current less than 5.4 A. Voltage 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
Standby use	No limit on initial charging current voltage 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
Capacity according to temperature	40°C (104°F) : 103% 25°C (77°F) : 100% 0°C (32°F) : 86%
Self discharge	CG Power AGM series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

**Constant Current Discharge (Amperes) at 25°C (77°F)**

F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	26.4	22.2	19.4	13.9	11.1	8.99	5.58	4.35	3.53	2.87	2.50	2.04	1.70	0.956
1.80V/cell	33.7	26.8	22.9	16.5	12.9	10.1	6.09	4.68	3.77	3.08	2.68	2.16	1.80	0.965
1.75V/cell	37.0	29.3	24.6	17.1	13.4	10.5	6.32	4.77	3.85	3.16	2.75	2.20	1.82	0.974
1.70V/cell	40.3	31.2	25.9	17.8	13.9	10.9	6.57	4.90	3.95	3.24	2.81	2.23	1.84	0.992
1.65V/cell	43.5	33.2	27.5	18.8	14.2	11.2	6.75	5.11	4.09	3.33	2.87	2.27	1.87	1.004
1.60V/cell	47.3	35.5	29.3	19.8	14.9	11.6	6.98	5.27	4.22	3.44	2.94	2.29	1.89	1.010

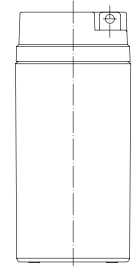
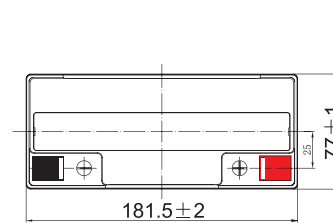
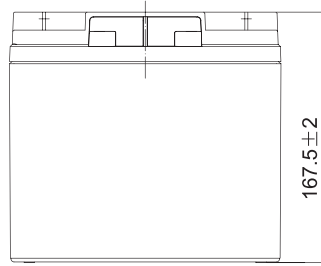
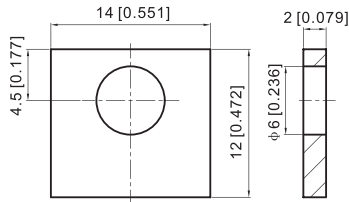
**Constant Power Discharge (Watts/cell) at 25°C (77°F)**

F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	49.2	41.8	36.9	26.8	21.4	17.4	10.9	8.50	6.90	5.63	4.94	4.04	3.37	1.91
1.80V/cell	62.0	49.8	43.0	31.2	24.7	19.4	11.8	9.11	7.34	6.02	5.28	4.27	3.56	1.93
1.75V/cell	67.3	53.8	45.9	32.3	25.5	20.2	12.2	9.25	7.48	6.17	5.41	4.34	3.60	1.94
1.70V/cell	72.3	57.1	47.9	33.5	26.5	20.8	12.7	9.49	7.67	6.31	5.52	4.40	3.63	1.98
1.65V/cell	77.5	60.3	50.7	35.1	27.0	21.5	13.0	9.86	7.91	6.48	5.63	4.47	3.70	2.00
1.60V/cell	82.7	63.7	53.4	36.7	27.9	22.0	13.3	10.1	8.13	6.66	5.74	4.50	3.74	2.01

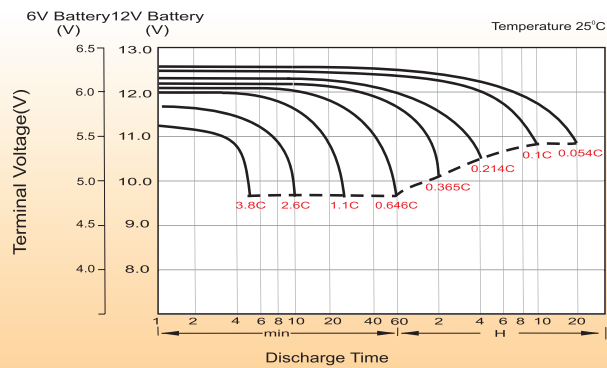
### Dimensions

#### T3 Terminal

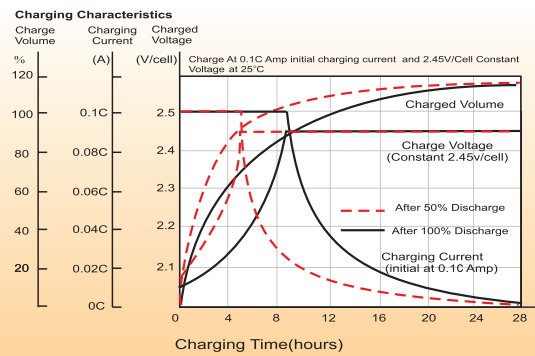
Unit: mm [inches]



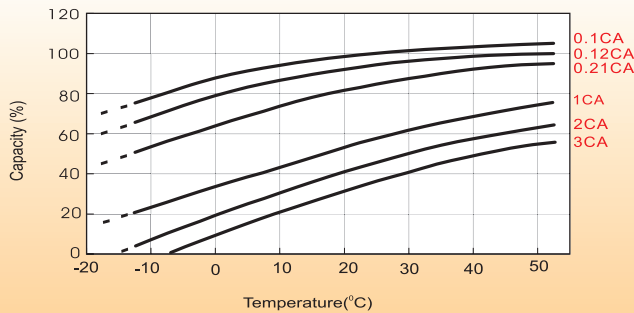
### Discharge Characteristics



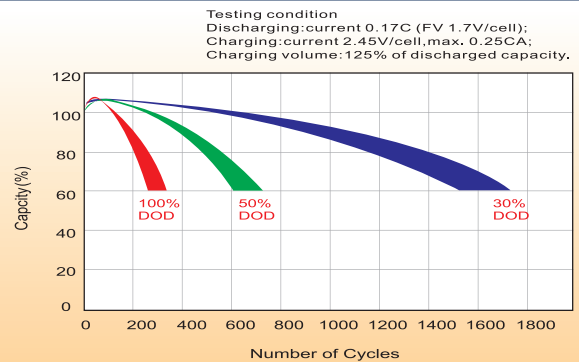
### Charging Characteristics (cycle use)



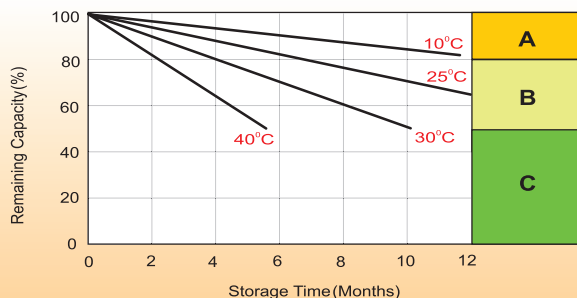
### Temperature Effects in Relation to Battery Capacity



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
  2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
  3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.