




**AGM Battery
(12V38AH)**
B00424/BAT-AGM-38A
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

Specification	
Nominal voltage	12V
Nominal capacity (20h)	38 Ah
Dimensions	Length : 197 ± 2 mm (7.76 inches) Width : 165 ± 2 mm (6.50 inches) Container height : 170 ± 2 mm (6.69 inches) Total height (with terminal) : 170 ± 2 mm (6.69 inches)
Weight	Approx. 14.2 kg (31.3 lb)
Terminal	T6
Container material	ABS
Rated capacity	40.8 Ah/2.04 A (20h, 1.80V/cell, 25°C/77°F) 38.0 Ah/3.80 A (10h, 1.80V/cell, 25°C/77°F) 33.4 Ah/6.67 A (5h, 1.75V/cell, 25°C/77°F) 30.3 Ah/10.1 A (3h, 1.75V/cell, 25°C/77°F) 24.5 Ah/24.5 A (1h, 1.60V/cell, 25°C/77°F)
Max. discharge current	456 A (5s)
Internal resistance	Approx. 9mΩ
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 11.4 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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	55.6	46.8	40.9	29.4	23.4	19.0	11.8	9.19	7.44	6.05	5.28	4.31	3.59	2.02
1.80V/cell	71.1	56.6	48.4	34.7	27.2	21.3	12.9	9.89	7.95	6.49	5.66	4.57	3.80	2.04
1.75V/cell	78.1	61.8	52.0	36.1	28.2	22.2	13.3	10.1	8.12	6.67	5.81	4.65	3.84	2.06
1.70V/cell	85.1	66.0	54.7	37.5	29.3	22.9	13.9	10.4	8.34	6.83	5.94	4.71	3.88	2.09
1.65V/cell	91.9	70.1	58.1	39.6	30.1	23.7	14.3	10.8	8.63	7.02	6.06	4.79	3.96	2.12
1.60V/cell	99.8	75.0	61.9	41.8	31.4	24.5	14.7	11.1	8.90	7.25	6.20	4.83	4.00	2.13

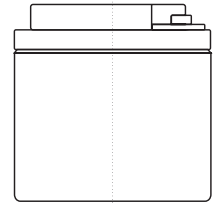
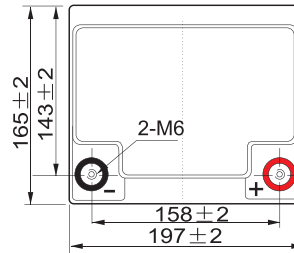
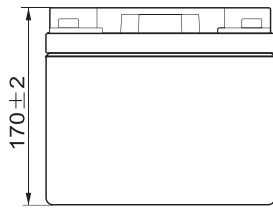
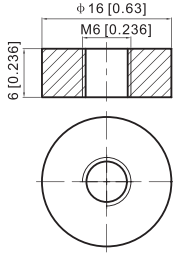
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	103.8	88.3	78.0	56.6	45.2	36.8	23.0	18.0	14.6	11.9	10.42	8.52	7.11	4.04
1.80V/cell	130.9	105.1	90.8	65.9	52.2	41.0	24.9	19.2	15.5	12.7	11.14	9.02	7.52	4.07
1.75V/cell	142.0	113.6	96.8	68.1	53.9	42.7	25.8	19.5	15.8	13.0	11.43	9.17	7.59	4.10
1.70V/cell	152.6	120.4	101.2	70.6	55.9	44.0	26.7	20.0	16.2	13.3	11.65	9.29	7.66	4.18
1.65V/cell	163.6	127.2	107.0	74.2	57.1	45.3	27.4	20.8	16.7	13.7	11.89	9.43	7.81	4.22
1.60V/cell	174.6	134.4	112.8	77.5	58.9	46.5	28.1	21.4	17.2	14.1	12.12	9.51	7.89	4.24

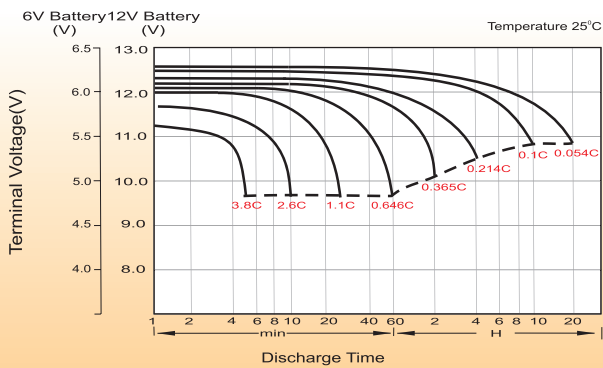
Dimensions

T6 Terminal

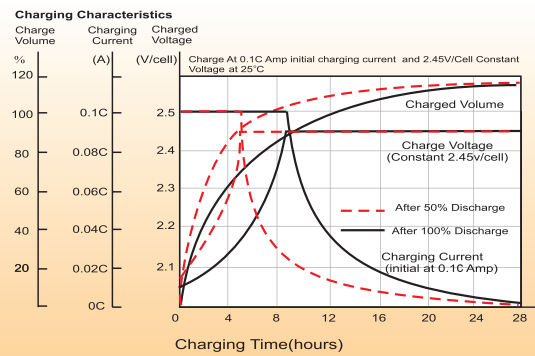
Unit: mm [inches]



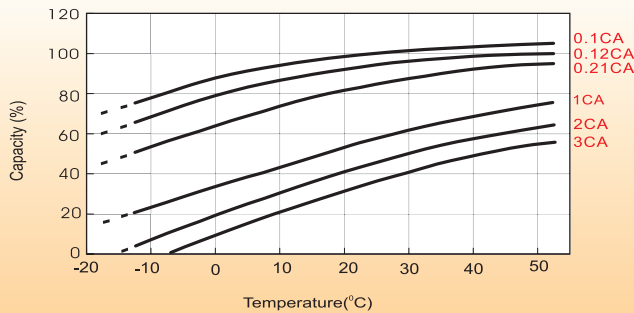
Discharge Characteristics



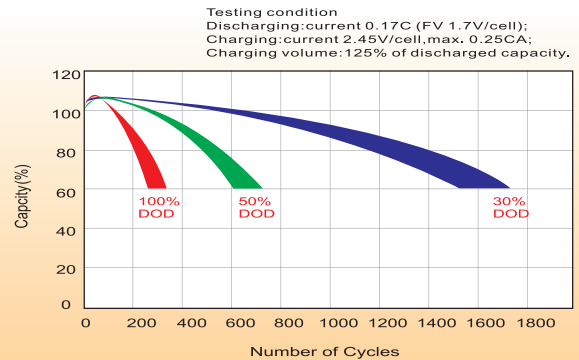
Charging Characteristics (cycle use)



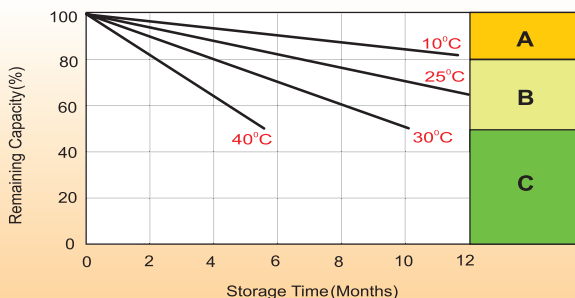
Temperature Effects in Relation to Battery Capacity



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.