

# General Purpose VRLA Battery

# FC6-4.2

6V  
Voltage

4.2Ah  
Capacity

AGM  
Technolog

General  
Purpose

FC series General Purpose VRLA batteries are designed with AGM(Absorbent Glass Mat) technology. FC series offers 5 years( $\leq 20Ah$ ) and 10 years( $\geq 20Ah$ ) full maintenance free design life. With a compact design and good reliability, this series is highly suited for security and alarm systems, UPS systems, emergency light systems and other small backup applications.



### COMPLIED STANDARDS

IEC 60896-21/22      JIS C8704  
YD/T799                BS6290 part4  
GB/T 19639            UL 1989

### GENERAL FEATURES

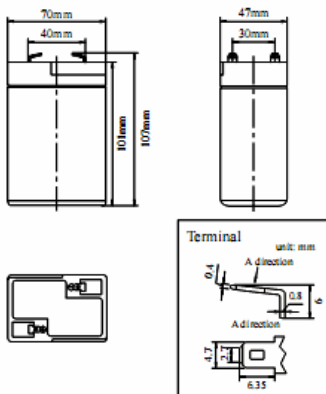
- Can be used at vertical or horizontal orientation
- High Reliability and Good Quality
- High gas recombination efficiency
- High Power Density
- Maintenance-Free Operation

### APPLICATIONS

- UPS & EPS
- Emergency lighting Systems
- Medical Equipment
- Cable TV Systems
- Alarm Systems
- Electric Test Equipment
- Security Systems

### DIMENSIONS & WEIGHT

Length(mm)	70 ± 1
Width(mm)	47 ± 1
Height(mm)	101 ± 1
Total Height(mm)	107 ± 1
Weight(kg)	0.75 ± 3%



### TECHNICAL SPECIFICATIONS

Nominal Voltage		6V(3 cells per unit)
Design Floating Life @25°C		5 Years
Nominal Capacity @25°C (20 hour rate@0.21 A,10.8V)		4.2Ah
Capacity @25°C	10hour rate (0.40A,10.8V)	4.0Ah
	5 hour rate (0.75A,10.5V)	3.75Ah
	1 hour rate (2.80A,9.6V)	2.80Ah
Internal Resistance	Full Charged Battery@25°C	≤20mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		55A(5s)
Capacity affected by Temperature (10 hour )	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 1.35A Voltage 6.8-6.9V
	Cycle Use	Initial Charging Current Less than 1.35A Voltage 7.2-7.5V

### BATTERY DISCHARGE TABLE

#### Discharge Constant Current per Cell (Amperes at 25°C)

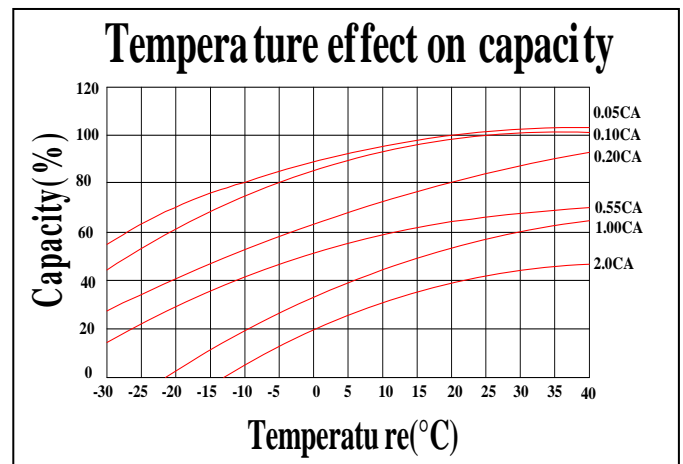
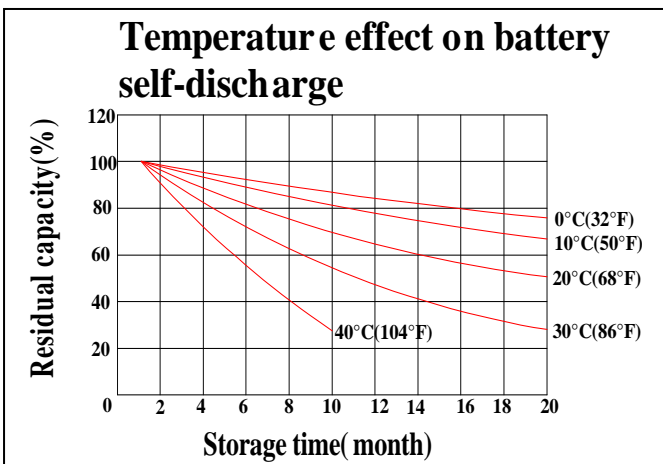
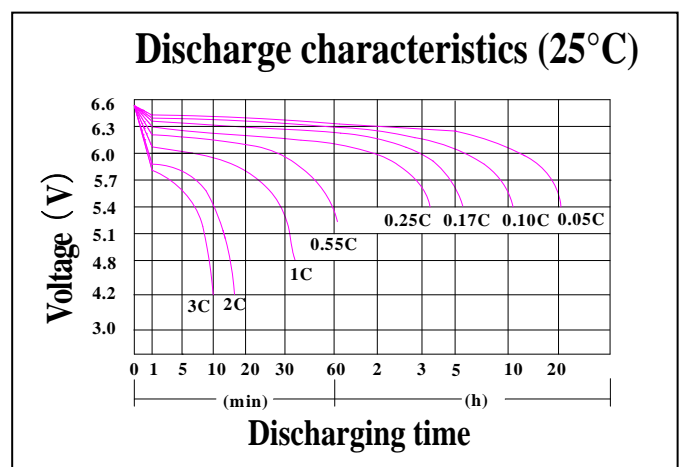
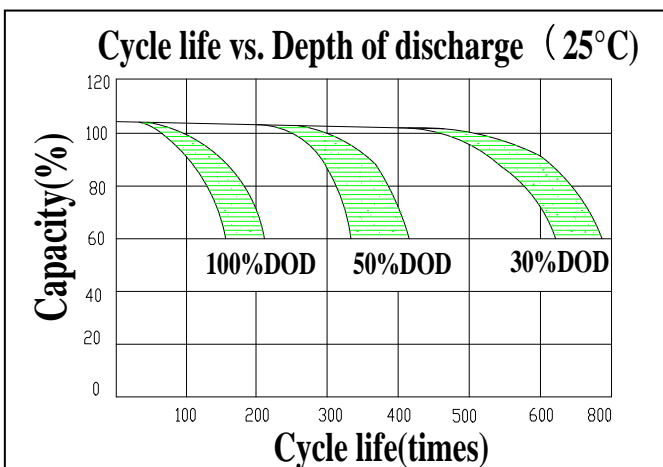
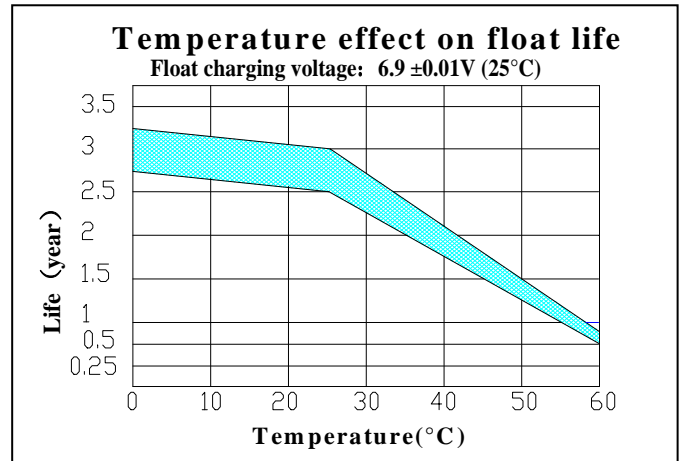
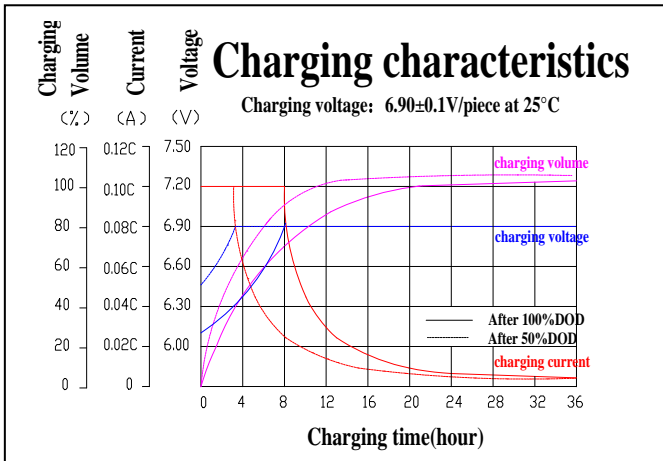
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	14.3	9.2	7.0	4.62	3.23	2.80	1.73	1.19	0.79	0.53	0.44	0.23
1.65V	14.1	9.1	6.8	4.54	3.18	2.74	1.70	1.17	0.78	0.52	0.43	0.23
1.70V	13.8	8.9	6.70	4.45	3.12	2.69	1.67	1.14	0.76	0.51	0.42	0.22
1.75V	13.5	8.7	6.57	4.37	3.06	2.64	1.64	1.12	0.75	0.50	0.42	0.22
1.80V	13.0	8.4	6.32	4.20	2.94	2.54	1.58	1.08	0.72	0.48	0.40	0.21

#### Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	27.6	17.8	13.4	8.9	6.23	5.38	3.34	2.29	1.52	1.02	0.85	0.44
1.65V	27.1	17.5	13.1	8.7	6.11	5.28	3.27	2.24	1.50	1.01	0.83	0.44
1.70V	26.6	17.1	12.9	8.6	6.00	5.18	3.21	2.20	1.47	0.99	0.82	0.43
1.75V	26.1	16.8	12.7	8.4	5.89	5.09	3.15	2.16	1.44	0.97	0.80	0.42
1.80V	25.1	16.2	12.2	8.1	5.66	4.89	3.03	2.08	1.39	0.93	0.77	0.40

**Note** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact MCA for the latest information.

## PERFORMANCE CHARACTERISTICS



## BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Standard Pb-Ca-Sn grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	ABS (UL94-V0 optional)	Flame Si-Rubbeand aging resistanacer	Copper No.187	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal

MCA Battery Manufacture Co.,Ltd.

Cangjiang Industrial Estate Gaoming District Foshan City China  
Tel: +86-757-66852620 Fax: +86-757-66852621

Copyright©2016 MCA Battery Manufacture Co.,Ltd.



HTTP: //WWW.MCABATTERY.COM