

6-GFM-55(12V55Ah)



Introduction

GFM series are made of Lead paste suitable for big current discharging, special alloy of high corrosion resistance. They are disposed of unique designed discharging structure and sealing technology. GFM series are featured with high rate current discharge, high reliability, low self-discharge, flexible installation and easy maintenance.

Battery Features

- 12 years floating design life
- Excellent consistency
- High reliability
- Low self-discharge
- Good recovery from deep discharge

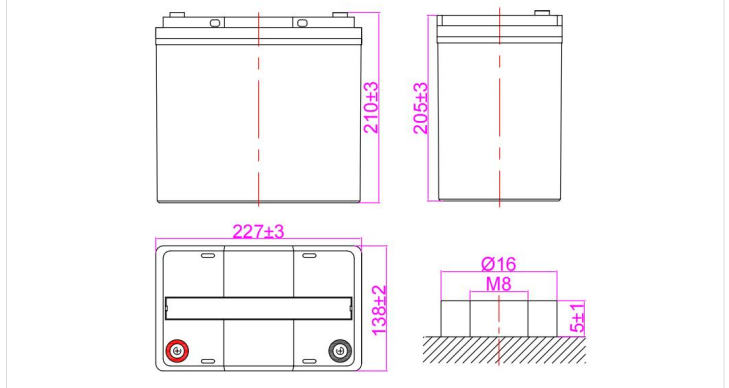
Electrical Specification

Design floating Life @ 20°C (68°F)	..... 12 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 2.89 A to 1.80Vpc	..... 57.8Ah
10 hour rate 5.50 A to 1.80Vpc	..... 55.0Ah
5 hour rate 9.63 A to 1.75Vpc	..... 48.2Ah
1 hour rate 35.8 A to 1.60Vpc	..... 35.8Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	.....7.0 mΩ
Max. Discharge Current @ 25°C /77°F	.....550A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	..... 14.4 ~ 15.0V
Max. Current	.....13.8A
Standby Use	..... 13.5V - 13.8V
Operating Temperature Range	
Discharge	..... -20 ~ 55°C
Charge	..... 0 ~ 40°C
Storage	..... -20 ~ 55°C
Recommended Operating Temp	..... 20 ~ 25°C
Self-Discharge	
The capacity declines by 3% per month@ 20°C (68°F). The batteries can be stored up to 6 months @ 25°C (77°F) and then a freshening charge is required. The interval under higher temperature would be shorter.	

Battery Picture



Dimensions



Dimension and Weight

Dimension				Weight (± 3%)	Terminal
Length	Width	Height	Total Height		
227 mm	138 mm	205 mm	210 mm	16.0kg	F5
8.94inch	5.43 inch	8.07 inch	8.27 inch	35.3lbs	

Typical Applications



Certificates



Constant Current Discharge* (Amperes @25 /77°F)

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	102	64.9	35.8	14.0	9.82	5.60	2.94
1.65V	99.3	63.6	35.2	13.9	9.76	5.59	2.93
1.70V	95.6	61.7	34.3	13.8	9.69	5.57	2.93
1.75V	92.4	60.2	33.6	13.8	9.63	5.54	2.91
1.80V	87.5	58.0	32.6	13.3	9.34	5.50	2.89

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	1117	728	408	165	116	66.9	35.3
1.65V	1090	714	401	164	115	66.7	35.2
1.70V	1050	692	391	163	115	66.5	35.1
1.75V	1014	675	384	162	114	66.1	34.9
1.80V	961	650	372	157	110	65.7	34.7

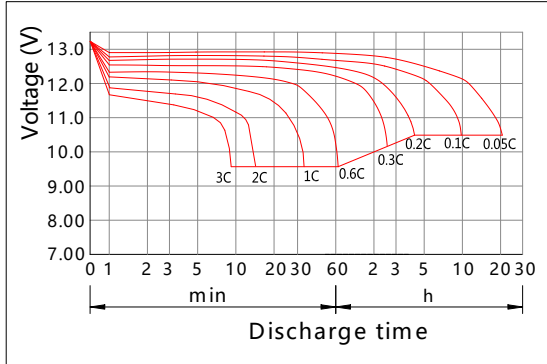
*The mentioned data are derived from of sample test result, for reference only.

6-GFM-55(12V55Ah)

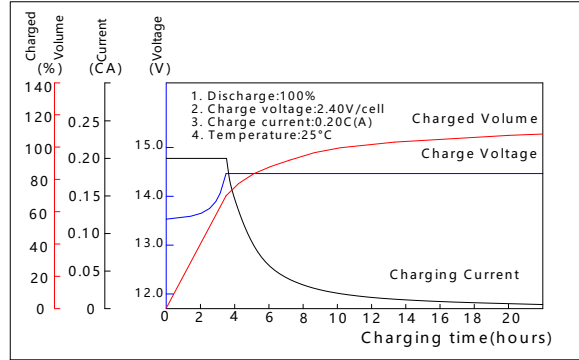


Graphs

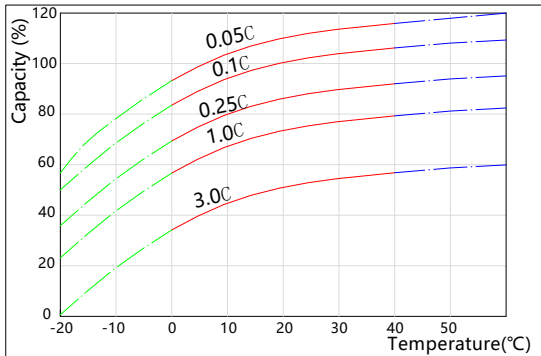
Discharge Characteristics(25°C)



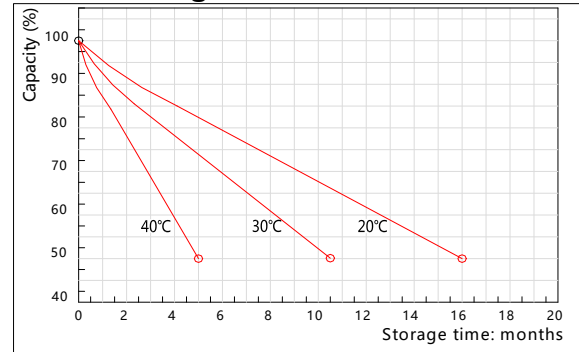
Charging Characteristics(25°C)



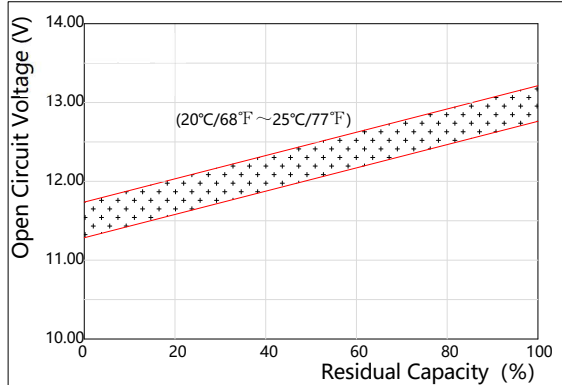
Effect of Temperature on Capacity



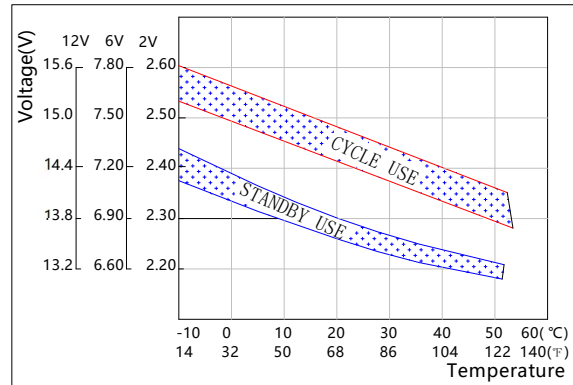
Self-discharge Characteristics



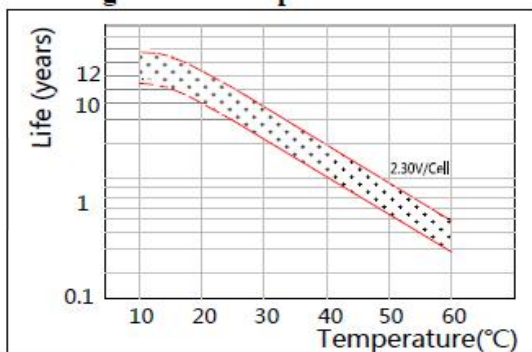
The Relationship between Open Circuit Voltage and Residual Capacity (25°C)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

