



# 6FM-7 12V7Ah

6FM-7 is a general purpose battery up to 5 years in standby service or more than 260 cycles at 100% discharge in cycle service. As with all Baace batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



## ► Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	7Ah @ 20hr-rate to 1.75V per cell @25°C (77°F)
Weight	Approx.2.0 kg(4.4 1 lbs)
Maximum Discharge Current	97.5A(5sec)
Internal Resistance	Approx. 29 mΩ
Operating Temperature Range	Discharge: -15°C~50°C ( 5°F~122°F) Charge: -15°C~40°C ( 5°F~104°F) Storage: -15°C~40°C ( 5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	2.1A
Equalization and Cycle Service	14.4 to 14.8 VDC/unit Average at 25°C (77°F)
Self Discharge	Baykee Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	F2-Faston Tab250
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



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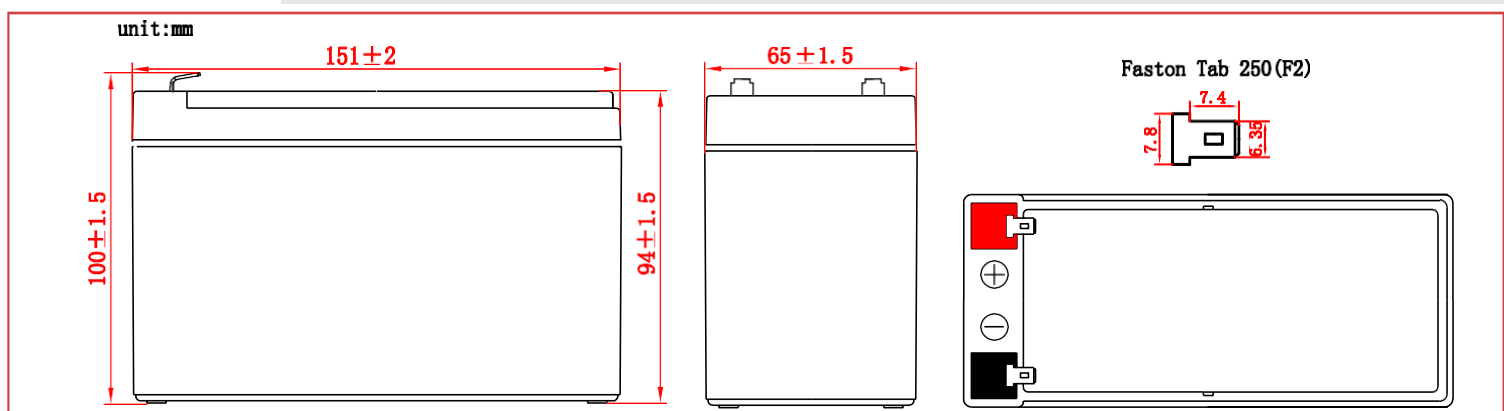


Baykee-manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL2000.

Baykee is also certified by ISO 9001 and ISO 14001.

## ► Dimensions :

Overall Height (H)	Container height (h)	Length (L)	Width (W)	
Unit: mm	100±1.5	94±1.5	151±2	65±1.5



## Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

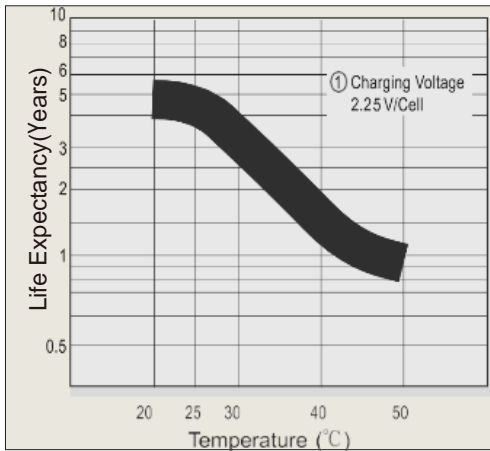
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	25.3	11.9	7.13	4.08	1.81	1.24	0.675	0.361
1.67V	23.6	11.4	6.96	3.96	1.79	1.22	0.671	0.357
1.7V	22.3	11.0	6.83	3.89	1.77	1.20	0.666	0.354
1.75V	21.0	10.2	6.65	3.80	1.75	1.18	0.658	0.350
1.8V	18.7	9.7	6.29	3.67	1.70	1.13	0.643	0.340
1.85V	16.8	8.9	5.69	3.55	1.61	1.06	0.617	0.329

## Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

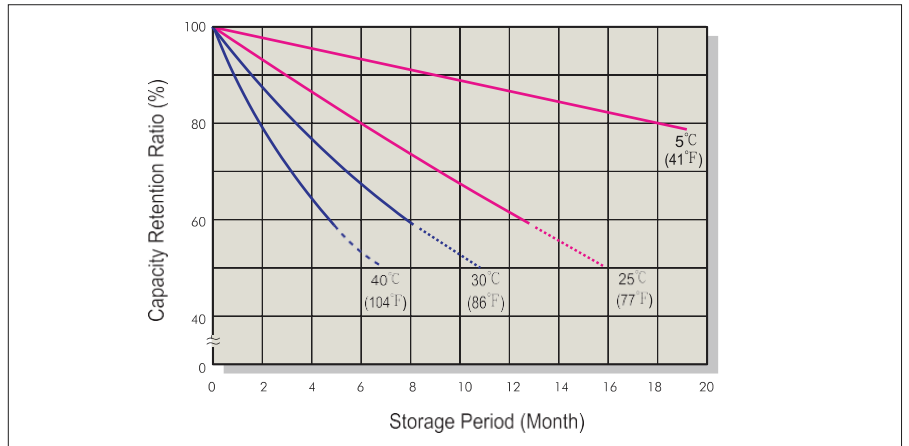
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	35.3	22.5	13.8	8.03	3.57	2.44	1.328	0.715
1.67V	35.0	22.0	13.6	7.87	3.59	2.42	1.330	0.712
1.7V	33.1	21.0	13.3	7.70	3.52	2.39	1.320	0.707
1.75V	29.0	19.5	13.0	7.51	3.49	2.35	1.302	0.702
1.8V	26.6	18.6	12.3	7.25	3.39	2.25	1.273	0.679
1.85V	24.9	17.2	11.2	7.08	3.24	2.13	1.233	0.663

Ratings presented herein are subject to revision without notice. Please refer to [www.baacebattery.com](http://www.baacebattery.com) to confirm the latest version.

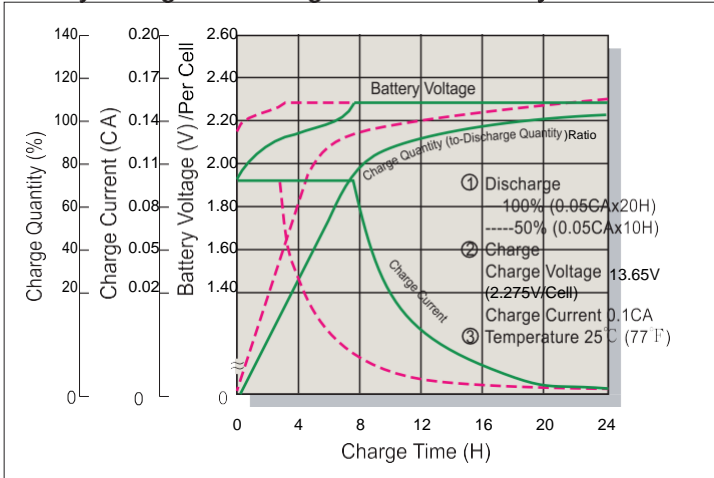
### Trickle(or Float)Design Life



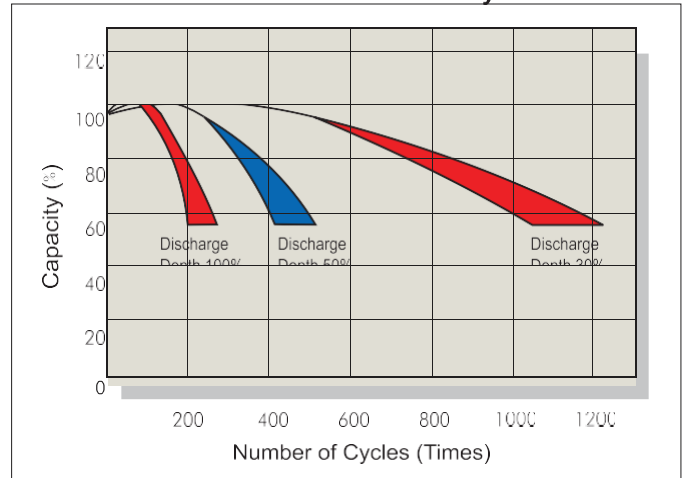
### Capacity Retention Characteristic



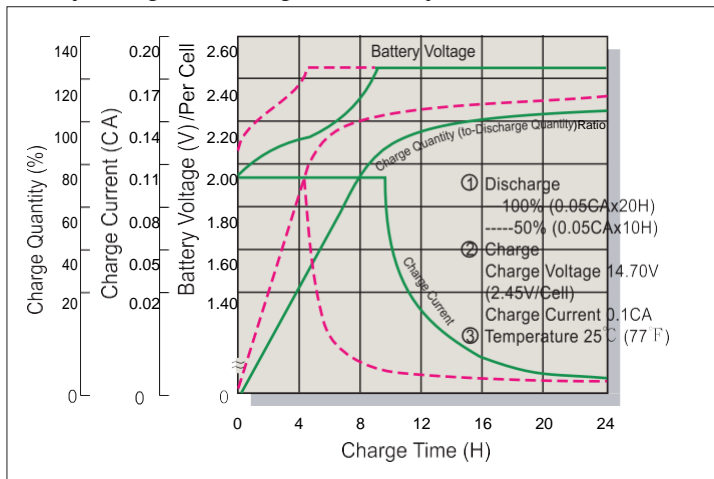
### Battery Voltage and Charge Time for Standby Use



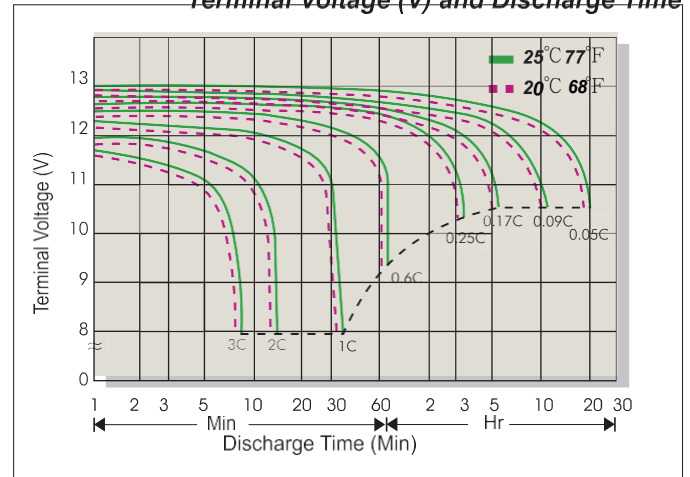
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### Charging Procedures

Application	Charge Voltage(V/Cell)		Max.Charge Current
	Temperature	Set Point Allowable Range	
Cycle Use	25(77 F)	2.45 2.40~2.50	0.3C
Standby	25(77 F)	2.275 2.25~2.30	

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

### Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity(20HR)
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

### Self-discharge Characteristics

Charge Voltage(V/Cell)	Charge Voltage(V/Cell)
3 Months	91%
6 Months	82%
12 Months	64%