



# 6FM-9

12V9Ah ▶

6FM-9 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

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	9Ah @ 20hr-rate to 1.75V per cell @25°C (77°F)
<b>Weight</b>	Approx. 2.50kg(5.512 lbs)
<b>Maximum Discharge Current</b>	130A(5sec)
<b>Internal Resistance</b>	Approx. 20 mΩ
<b>Operating Temperature Range</b>	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)
<b>Nominal Operating Temperature Range</b>	25°C±3°C (77°F±5°F)
<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
<b>Recommended Maximum Charging Current Limit</b>	2.7A
<b>Equalization and Cycle Service</b>	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
<b>Self Discharge</b>	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.
<b>Terminal</b>	F2-Faston Tab250
<b>Container Material</b>	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



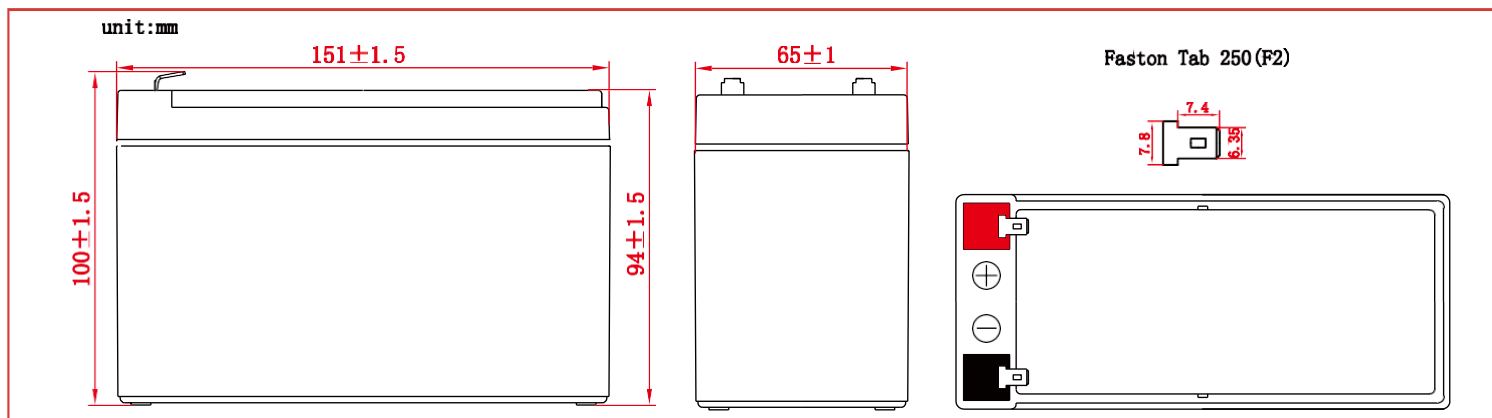
CTK20141211018



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

Baykee is also certified by ISO 9001 and ISO 14001.

► <b>Dimensions :</b> Unit: mm	Overall Height (H)	Container height (h)	Length (L)	Width (W)
	100±1.5	94±1.5	151±1.5	65±1



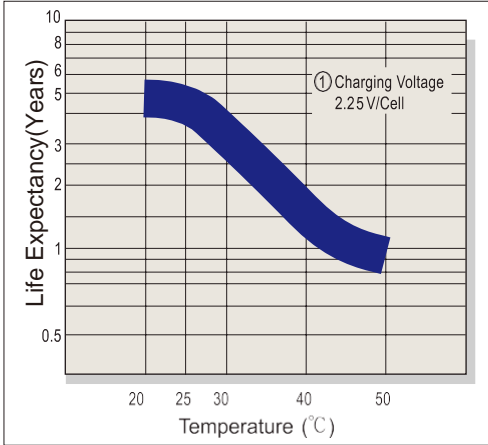
## Constant Current Discharge Characteristics Unit : A(25°C/ 77° F)

F./Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	28.1	16.6	9.51	5.44	2.37	1.60	0.852	0.457
1.67V	27.6	16.1	9.42	5.38	2.35	1.59	0.849	0.455
1.70V	27.2	15.8	9.36	5.34	2.34	1.58	0.846	0.454
1.75V	25.9	15.1	9.16	5.20	2.30	1.55	0.837	0.450
1.80V	23.3	14.0	8.80	4.96	2.22	1.50	0.819	0.441
1.85V	18.1	11.8	8.12	4.53	2.02	1.40	0.774	0.423

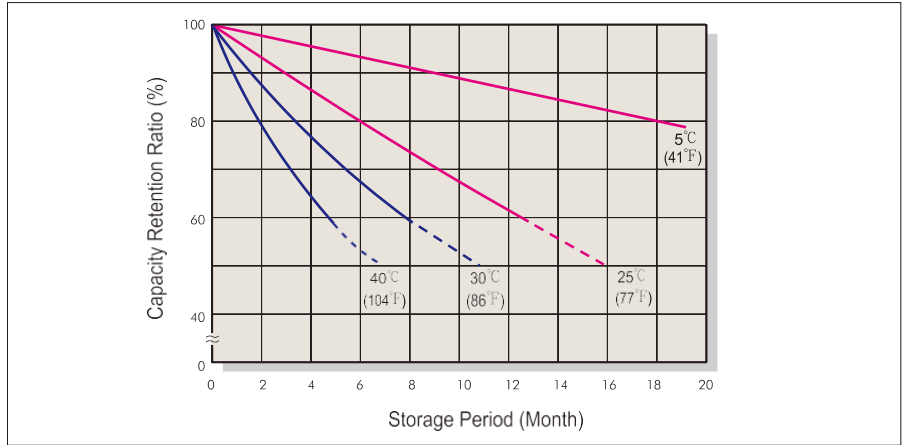
## Constant Power Discharge Characteristics Unit : : W/cell (25°C/77° F)

F./Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	53.0	31.6	18.4	10.34	4.68	3.06	1.68	0.905
1.67V	50.6	30.1	18.2	10.25	4.63	3.04	1.67	0.903
1.70V	49.0	29.1	18.1	10.19	4.61	3.03	1.66	0.901
1.75V	44.8	26.9	17.8	10.02	4.53	2.98	1.64	0.893
1.80V	38.6	23.9	17.1	9.70	4.37	2.88	1.61	0.876
1.85V	30.0	20.1	15.8	9.01	4.02	2.73	1.53	0.844

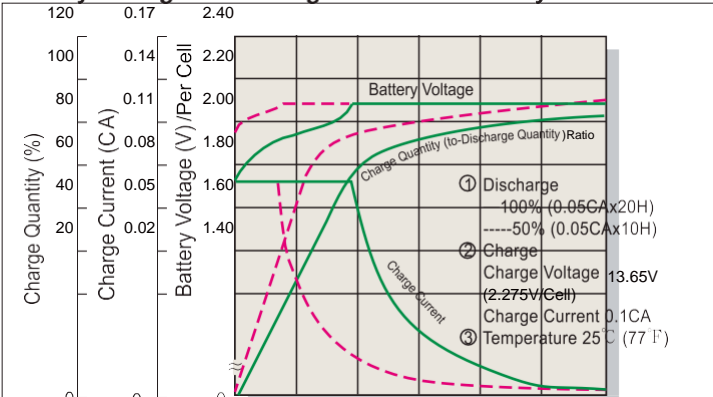
### Trickle(or Float)Design Life



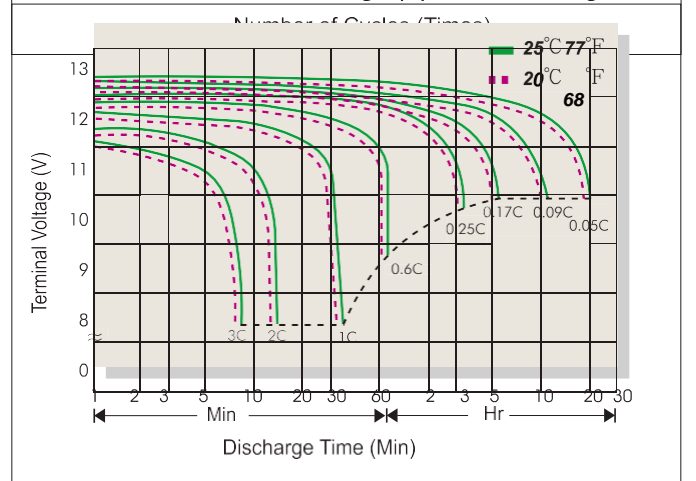
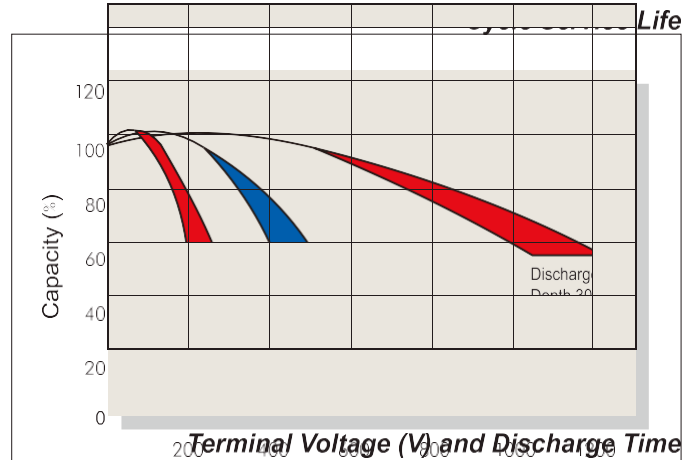
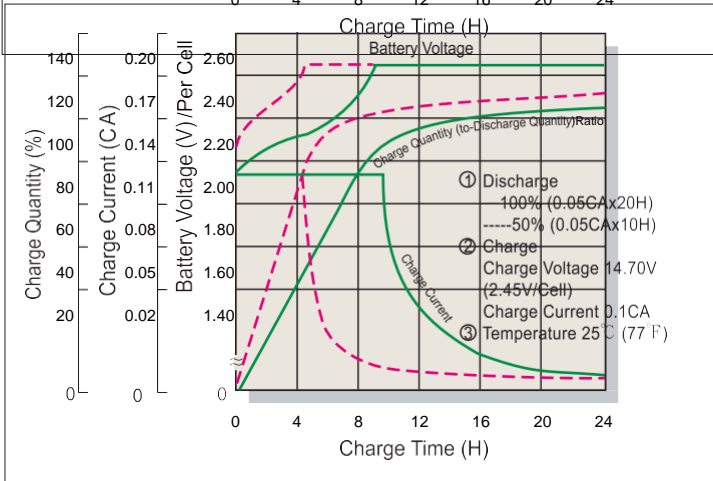
### Capacity Retention Characteristic



### Battery Voltage and Charge Time for Standby Use



### Battery Voltage and Charge Time for Cycle Use



### Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
	°C			

### 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

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%