



# 6FM1.9 (12V1.9Ah)

6FM1.9 is a general purpose battery with 5 years life in standby service, or more than 260 cycles at 100% D.O.D by cyclic use. As with all QiangJun batteries, all FM models are rechargeable, highly efficient, leak proof and maintenance free.

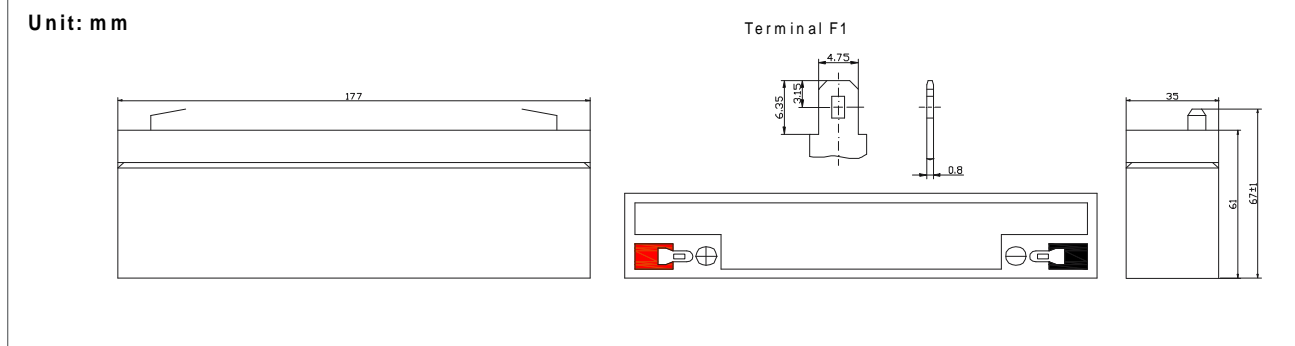


## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	1.9Ah@ 20hr-rate to 1.75V per cell @ 25°C
Weight Max. Discharge C	Approx. 0.83 Kg
urrentInternal Resistan	19 A (5 sec) Ap
ce	prox. 55 m
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C St orage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	0.57 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	QiangJun batteries can be stored for more than 6 month at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shor
Terminal	Faston Tab 187(F1)
Constainer Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V2 can be available upon request.



## Dimensions



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

F.V/Time	5 MIN	10 MIN	15 MIN		1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
1.60V	7.89	5.27	4.05	2.23	1.32	0.79	0.49	0.40	0.32	0.24	0.19	0.10
1.67V	7.38	4.92	3.81	2.19	1.31	0.78	0.48	0.40	0.32	0.24	0.18	0.10
1.70V	6.98	4.77	3.72	2.18	1.30	0.78	0.48	0.40	0.32	0.24	0.18	0.10
1.75V	6.31	4.46	3.53	2.13	1.28	0.77	0.48	0.39	0.32	0.24	0.18	0.10
1.80V	5.63	4.16	3.33	2.08	1.26	0.76	0.48	0.39	0.31	0.23	0.18	0.09
1.85V	4.96	3.85	3.14	2.03	1.25	0.75	0.47	0.39	0.31	0.23	0.17	0.09

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

F.V/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
1.60V	15.2	9.88	8.03	4.46	2.64	1.58	0.97	0.79	0.75	0.47	0.37	0.21
1.67V	14.3	9.50	7.62	4.39	2.63	1.57	0.97	0.79	0.75	0.47	0.37	0.20
1.70V	14.0	9.22	7.44	4.36	2.62	1.57	0.97	0.79	0.75	0.47	0.36	0.20
1.75V	12.6	8.84	7.05	4.25	2.58	1.54	0.96	0.79	0.74	0.47	0.36	0.19
1.80V	11.3	8.27	6.67	4.15	2.53	1.52	0.95	0.78	0.74	0.47	0.35	0.18
1.85V	9.93	7.70	6.28	4.05	2.49	1.50	0.95	0.78	0.74	0.47	0.35	0.18

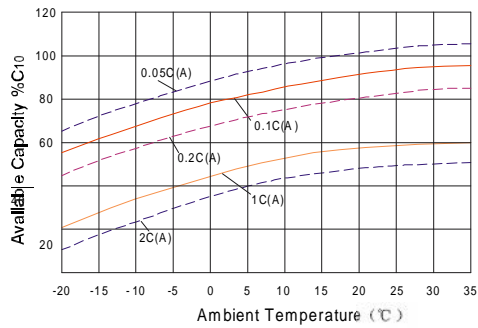
All mentioned values are average values.

# 6FM1.9

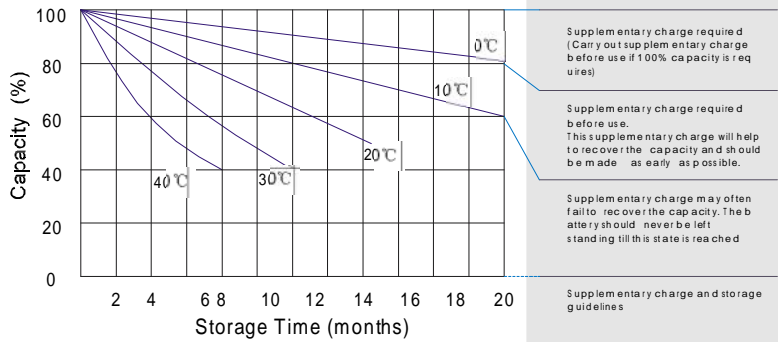
12V1.9Ah



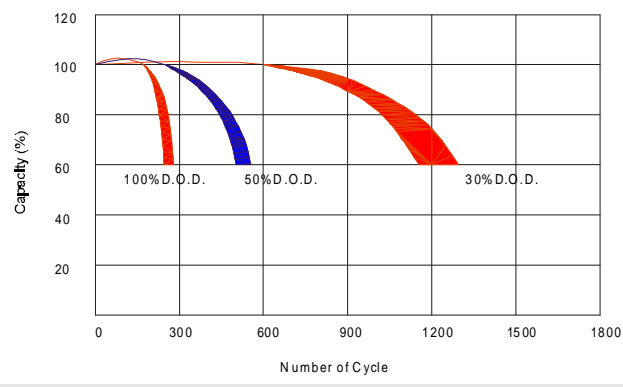
## Temperature effects curve



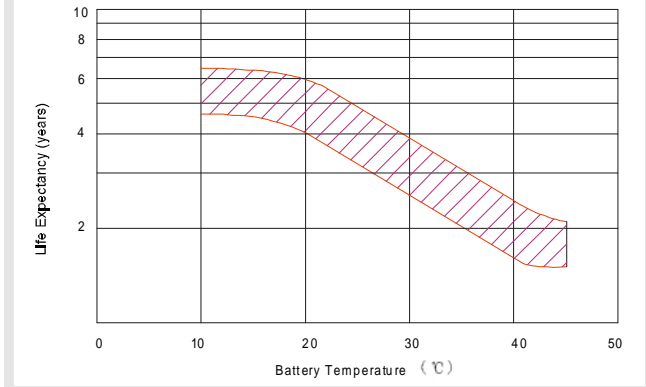
## Storage characteristic



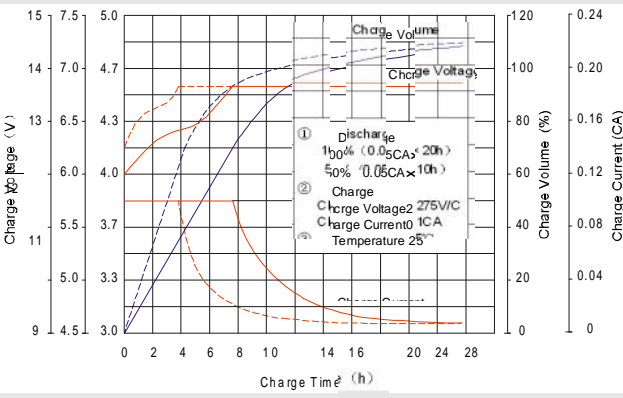
## Life characteristics of cyclic use



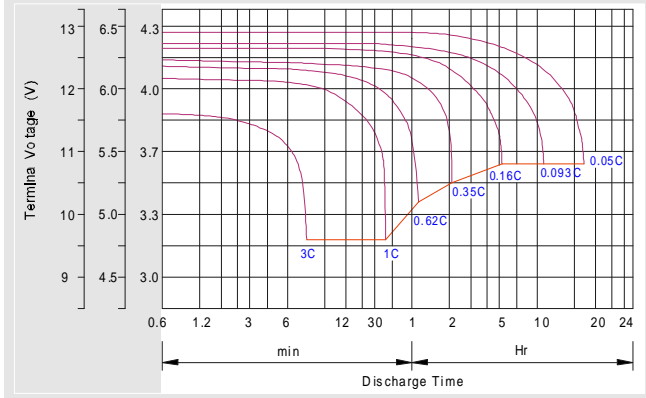
## Effect of Temperature on long term float life



## Charge characteristic curve for standby use



## Discharge characteristic curve



### Charging Procedures

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.7	14.4~15.0	0.3C
Standby	25°C	13.7	13.6~13.8	0.3C

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) <	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

### Charging Method:

Constant Voltage	14.4~15.0V, 5~11h, Max. Current 0.1CA
Constant Current	0.1CA×5h
Fast	0.3CA×1.7h

### Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	7.35	7.25~7.45	0.3C
Standby	25°C	6.85	6.8~6.9	0.3C

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