



## 6FM9S(12V9Ah)

**LONGWAY® 6FM9S** is specially designed for green energy systems. **6FM9S** have a good deep cycle property, maintenance-free. It can be used for more than 350 cycles at 100% discharge in cycle service, up to 8 years in standby service.



ISO 9001:2008 Standard



ISO 14001:2004 Standard



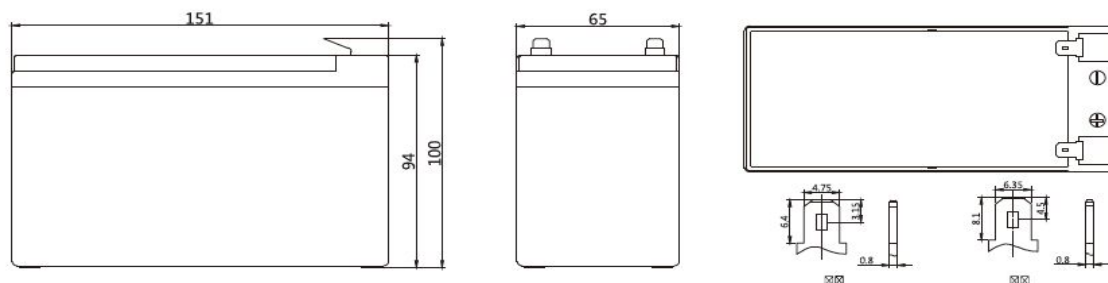
MH46789



### Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	9Ah@10Hr-rate to 1.80V per cell@25°C
	10Ah@100Hr-rate to 1.90V per cell@25°C
Weight	Approx. (2.60±3%) kg (5.71lbs)
Maximum Discharge Current	90A(5sec)
Internal Resistance	Approx. 25mΩ full charged @25°C
Operating Temperature Range	Discharge: -20°C~60°C
	Charge: 0°C~50°C
	Storage: -20°C~60°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	13.7~13.9VDC/unit Average @25°C
Maximum Charging Current	2.7A
Equalization and Cycle Service	14.4V~15.0VDC/unit Average @ 25°C
Self Discharge	LONGWAY Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F1/F2
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

**Dimensions:** L151\*W65\*H94(TH100)mm



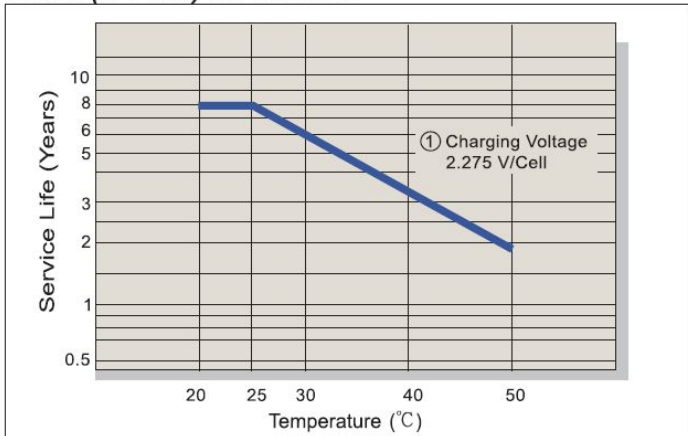
### Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	15.4	10.8	5.9	3.5	2.4	1.66	1.08	0.91	0.47	0.22	0.11
9.90	15.1	10.6	5.8	3.5	2.4	1.65	1.07	0.91	0.46	0.22	0.11
10.2	14.8	10.4	5.7	3.4	2.4	1.64	1.07	0.91	0.46	0.22	0.11
10.5	14.3	10.0	5.5	3.4	2.4	1.62	1.06	0.90	0.46	0.21	0.10
10.8	14.0	9.8	5.4	3.3	2.3	1.61	1.04	0.90	0.46	0.21	0.10

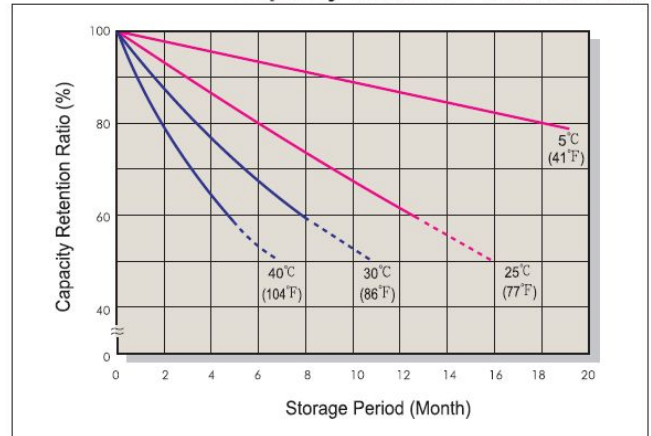
### Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	170	123	68	40	28	19.7	13.0	10.9	5.6	0.44	0.22
9.90	166	121	66	40	28	19.6	12.9	10.9	5.6	0.44	0.21
10.2	163	118	65	39	28	19.4	12.8	10.8	5.5	0.43	0.21
10.5	158	115	62	39	28	19.2	12.7	10.8	5.5	0.42	0.21
10.8	155	112	61	39	27	19.0	12.5	10.7	5.5	0.42	0.21

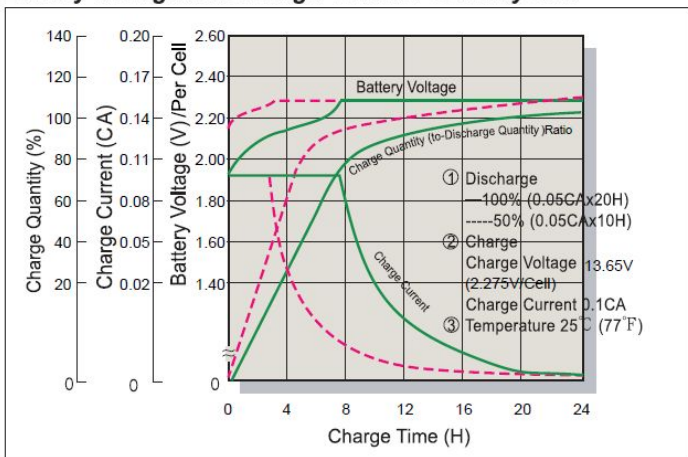
### Trickle (or Float) Service Life



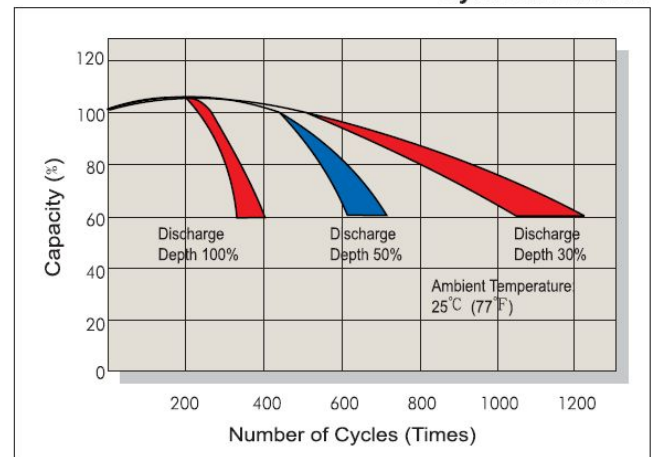
### Capacity Retention Characteristic



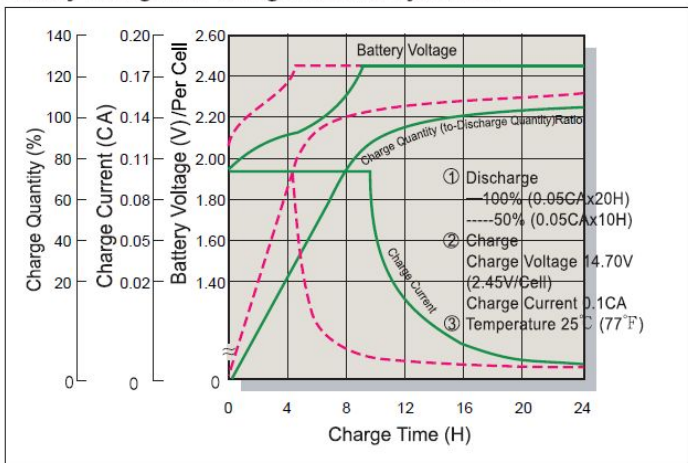
### Battery Voltage and Charge Time for Standby Use



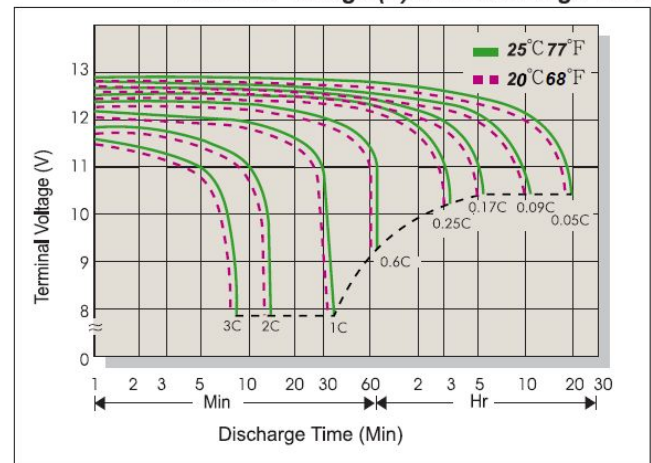
### Cycle Service Life



### 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°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(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 < (A)	(A) > 1.0C

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