



# 6-XFMJ-90

## 12V Front-terminal gel battery

**Jiangsu Shuangdeng group Co.,Ltd**

### Application

- Telecom
- Switching power supply
- CATV
- Oil and gas
- UPS, medical facilities
- Solar energy
- Street lamp
- Other situation with normal application

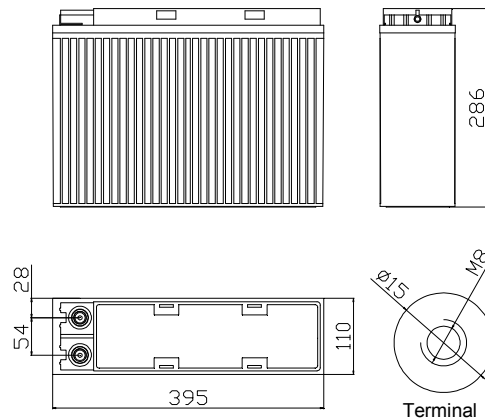
### Characteristics

- ✚ Designed service life of 15 years
- ✚ High cycle service life
- ✚ Wider temperature range
- ✚ Excellent deep cycle performance
- ✚ Excellent high rate discharge
- ✚ Stronger constant power discharge capability
- ✚ Better charge acceptability
- ✚ Better safety performance reliability
- ✚ Performance/price ratio is high
- ✚ yearly operating cost is low
- ✚ Environment protection and energy saving

Rated voltage	12 V
Capacity@ 25°C (77°F)	90Ah @ 10hr to 10.8V
Weight	32.5kg (71.5 lb)
Reference internal resistance (charged)	5.0mΩ @ 25°C (77°F)
Short-circuit current	2400A (0.1S reference value )
Max discharge current	270A (5sec)
Self-discharge	< 20% 180 days @ 25°C (77°F)
Temperature range	Application: -20°C ~ 50°C (-4°F ~ 122°F) Storage: 5°C ~ 40°C (41°F ~ 104°F) Recommendation: 20°C ~ 30°C (68°F ~ 86°F)
Max charge current	13.5A
Charge voltage @ 25°C (77°F)	Float charge: 13.5V, average charge: 14.1V Temperature compensation factor: -18 mV/°C
Terminal output	M8 copper terminal (HPb59-1)

### Execution standard:

IEC60896-2/21 BS EN 61427-2002  
Q/321284KCC 03-2006 YD/T 1360  
**Authentication and certificate:**  
**Certificate of Qualification on Perfecting Measurement & Measuring System**  
GB/T19022 ISO10012:2003、IDT  
**Quality Management System Authentication**  
GB/T19001 NO.030006Q10002R0M-2  
**Environmental Management System Authentication**  
ISO 14001 NO.010607E2024R1M-2  
**Occupational Health Management System Authentication**  
GB/T28001 NO.010607S10147R0M-2  
**Product authentication:**  
YD/T1360 NO.030074640566R1M  
**CE authentication**  
EN 61000-6-3:2001+A11:2004  
EN 61000-6-1:2001  
**National Industrial Product Production License**  
XK06-006-00532  
**Product Quality Test Free Certificate**



### Structure features of Shuangdeng 6-XFMJ series gel battery:

- Plate: Both positive plate and negative plate adopt pasted plate. The grid is molded with multi-component alloy which has higher hydrogen evolution potential, better corrosion-proof performance and longer service life. It improves utilization ratio of active substance and charge acceptance performance.
- Electrolyte: The primary material is gas silicon dioxide from Germany. The electrolyte is thin sol state in the initial stage of filling. The electrolyte which is the gel state in the finished battery is no leakage and delaminating phenomenon.
- Battery case lid: Cover and container made of ABS and advanced heat-sealing technology improves battery intensity, safety and stability.
- Terminal sealing: The terminals are made of copper cores with large diameter, so the terminals have large current-carrying capacity and low internal resistance. The unique double sealing structure of terminal post can effectively avoid leakage, to guarantee reliability of terminal post sealing.
- Safety valve: The safety valve with constant open/close pressure from Germany technology can prevent the electrolyte dry-out.

Discharge current at different final voltages and different discharge rates unit: A (25°C, 77°F)

	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
11.4	126	110	81	60	52	41	29	25.7	18.6	15.7	12.2	10.0	8.0	4.1	0.94	0.78
11.1	158	122	108	72	57	46	34	27.6	20.6	16.3	13.0	10.3	8.6	4.6	0.99	0.84
10.8	189	144	122	77	60	50	37	30.3	22.5	16.9	14.3	10.7	9.0	4.8	1.02	0.86
10.5	207	162	131	81	64	52	39	32.0	23.0	17.3	14.6	10.9	9.2	5.0	1.04	0.89

Discharge power at different final voltages and different discharge rates unit: W (25°C, 77°F)

	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
11.4	1355	1127	778	617	500	451	338	302	214	181	150	107	104	50	11.6	9.8
11.1	1579	1336	956	788	600	491	375	333	235	197	153	111	104	54	12.2	10.2
10.8	1715	1463	1058	884	659	538	404	347	257	206	167	115	107	56	12.4	10.4
10.5	1877	1637	1223	933	668	573	467	352	266	215	174	122	113	58	12.5	10.5



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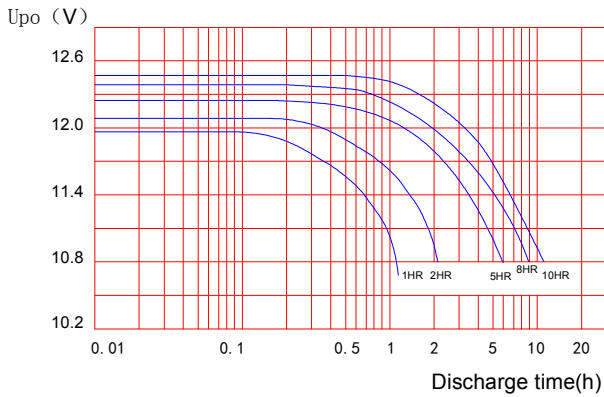


Figure 1 Discharge characteristic curve (20°C)

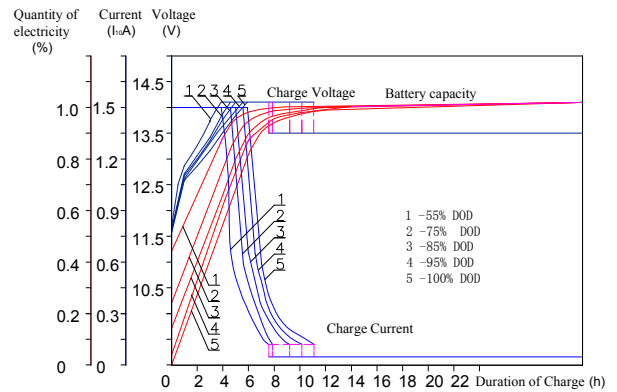


Figure 2 Constant voltage charge characteristic curve

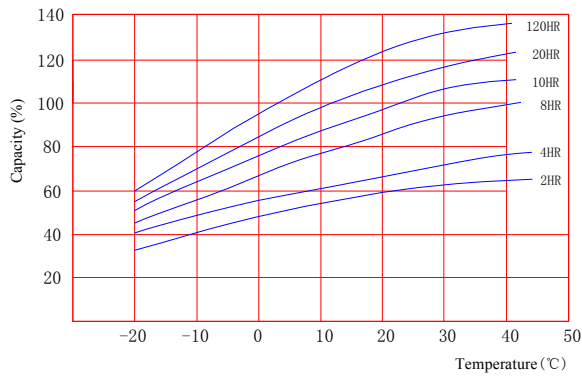


Figure 3 Relation curves between capacity and temperature

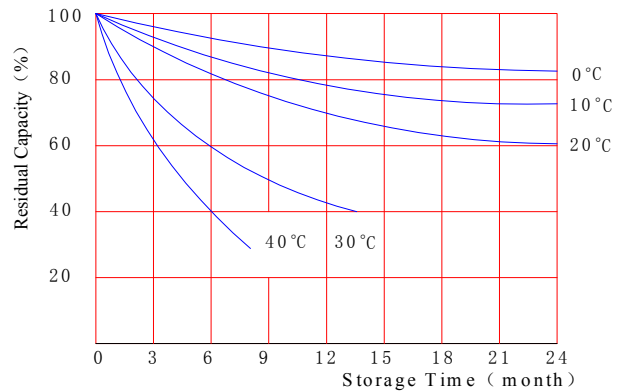


Figure 4 Self-discharge characteristic curve

Chinashoto promises to provide excellent engineering service for customers, including product mode, installation design and on-site maintenance.

The instruction is only taken as reference instead of inspection standard. Additional notification won't be available for product improvements to adjust the parameters. Inspection shall be performed in accordance with standards.

We must make a statement, test battery on service life and safe performance is operated in strictly environment. It is difficult to achieve the expected life under such conditions, so it is not recommended to use the battery under these conditions.

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