



# Holy Enterprise Limited

FL.2, No.12 North Ave.1, Industrial Rd. East, Gusan, Guzhen, Zhongshan, Guangdong, China

## Specification

2-FM-4 4V4AH/20HR

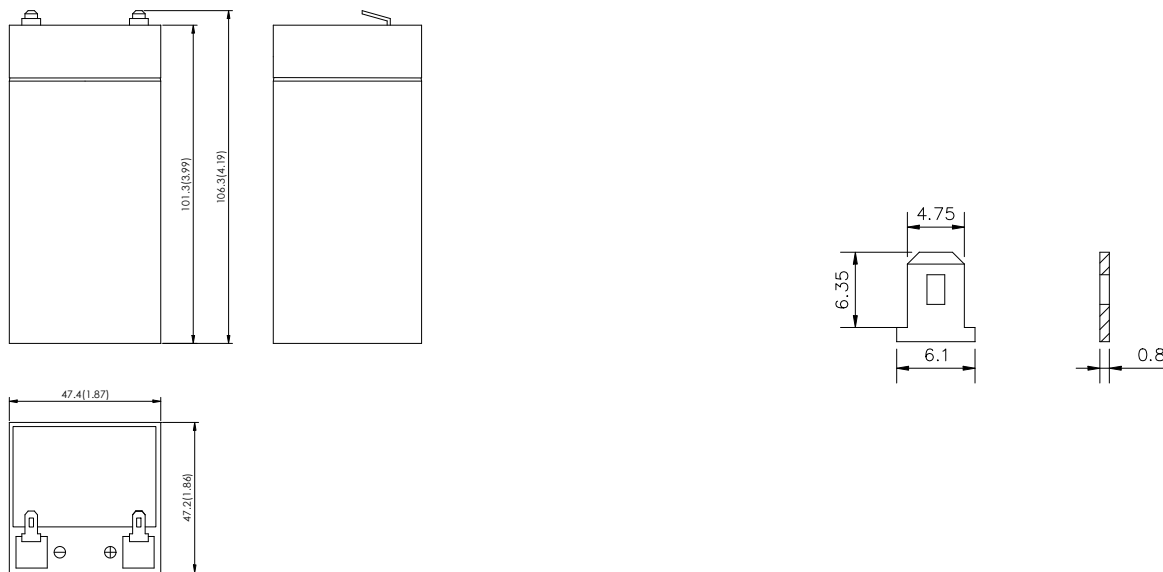
Cells Per Unit	2
Voltage Per Unit	4
Capacity	4.0AH@20hr-rate to 1.8V per cell @ 25°C
Weight	Approx.0.54kg (Tolerance±3%)
Max. Discharge Current	40A(5sec)
Internal Resistance	Approx 35 mΩ
Operating Temperature	Discharge: -20°C~50°C Charge: 0°C~40°C Storage: -20°C~50°C
Normal Operating Temperature	25±3°C
Float Charging Voltage	2.25 to 2.27 VDC/unit Average at 25°C
Maximum Charging Current	1.2A
Equalization and Cycle service	2.35 to 2.40 VDC /unit Average at 25°C
Terminal	Terminal: F1



## Application

Alarm Systems  
Electronic Toys  
Medical Equipment  
Cable Television  
Communications Equipment  
Electronic Cash Registers  
Electric Test Equipment  
Emergency lighting Systems  
UPS

Dimension: 47(L) ×47(W) ×101(H) (Total 104 mm)



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

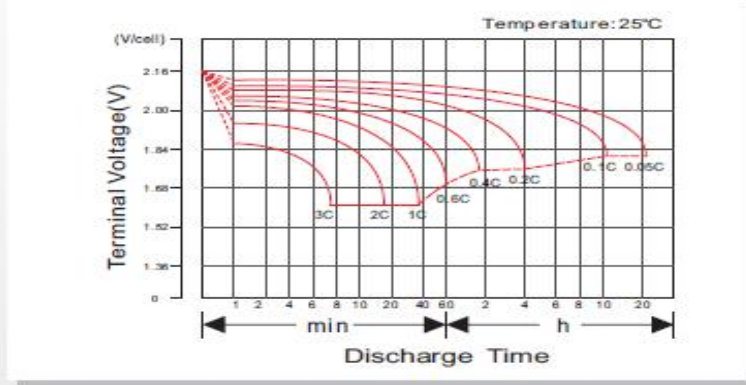
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	10HR	20HR
1.80V/cell	14.4	9.07	7.35	4.26	2.67	1.51	1.09	0.87	0.74	0.391	0.211
1.75V/cell	15.2	9.61	7.76	4.42	2.75	1.55	1.13	0.90	0.75	0.393	0.213
1.70V/cell	15.9	10.0	8.04	4.53	2.81	1.58	1.13	0.91	0.76	0.395	0.215
1.65V/cell	16.6	10.5	8.34	4.67	2.88	1.59	1.14	0.91	0.77	0.398	0.217
1.60V/cell	17.1	10.8	8.55	4.77	2.93	1.60	1.15	0.92	0.78	0.399	0.218

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

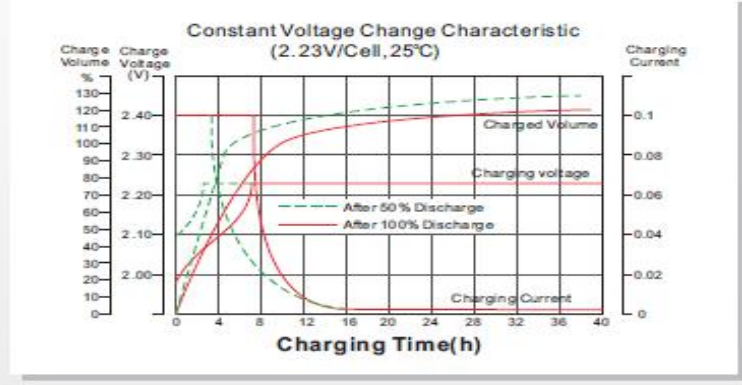
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	10HR	20HR
1.80V/cell	53.4	34.1	27.9	16.3	10.1	5.9	4.32	3.47	2.95	1.64	0.84
1.75V/cell	56.6	36.1	29.5	16.9	10.5	6.05	4.46	3.57	3.04	1.67	0.85
1.70V/cell	59.2	37.8	30.5	17.3	10.8	6.14	4.49	3.60	3.07	1.68	0.86
1.65V/cell	61.7	39.4	31.7	17.9	11.1	6.20	4.52	3.62	3.09	1.69	0.87
1.60V/cell	63.6	40.6	32.5	18.2	11.3	6.23	4.54	3.64	3.11	1.70	0.88

All mentioned values are average values.

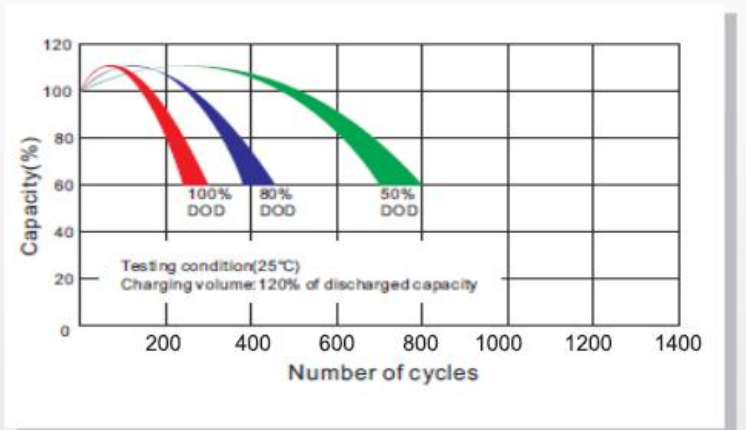
### Discharge Characteristics Curve



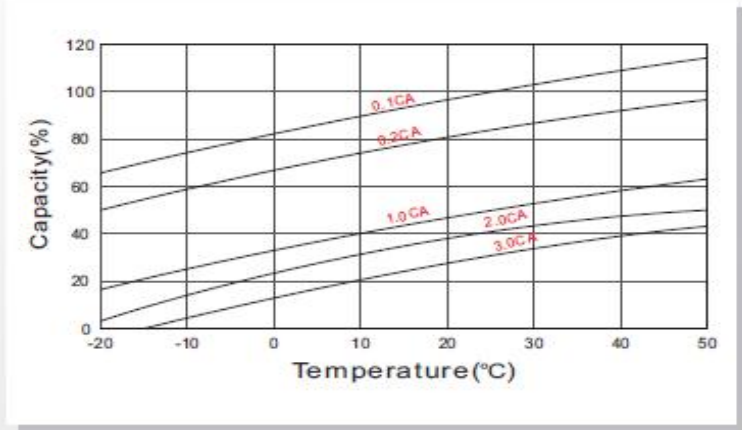
### Charging Characteristics Curve



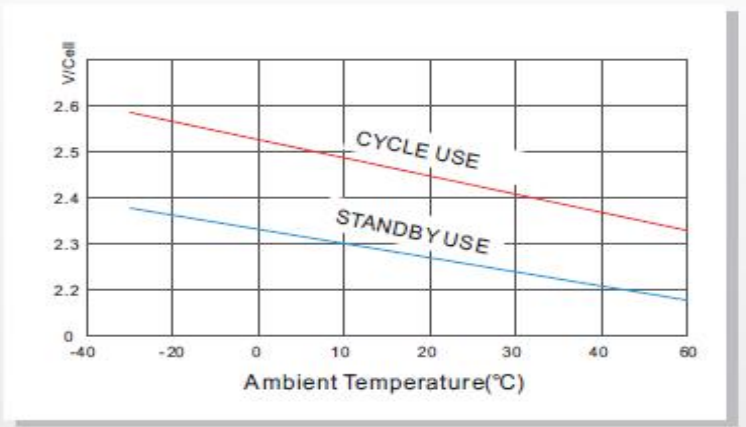
### Cycle life in relation to depth of Discharge



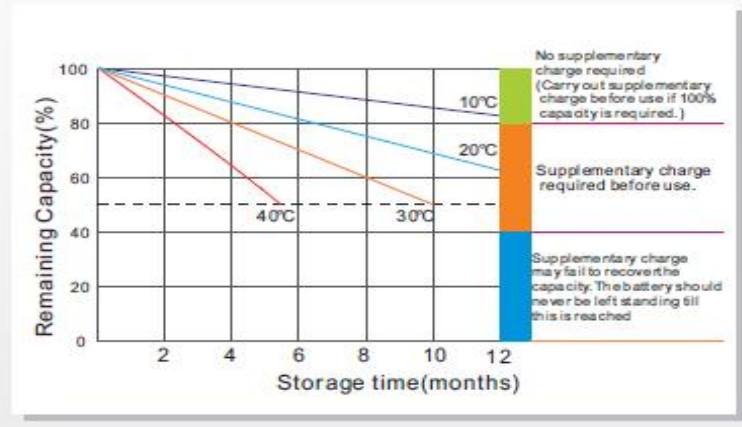
### Temperature effects on Capacity



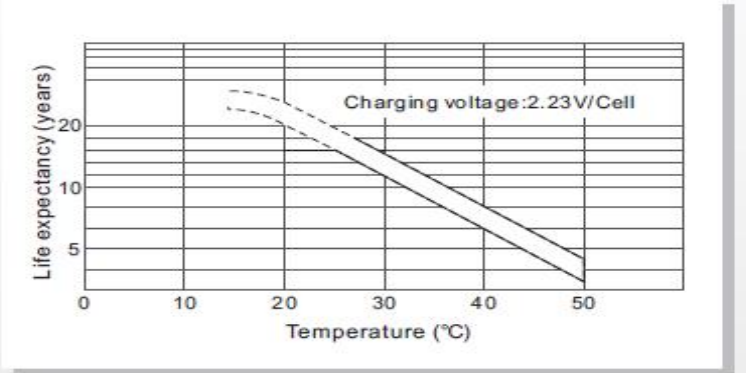
### Relationship between charging voltage and temperature



### Self-discharge Characteristics



### Temperature effects on Float life



### Life Characteristics of Standby use



### Maintenance & Cautions

- ※ Every month, recommend inspection every battery voltage;
- ※ Every three months, recommend equalization charge once;  
Equalization charge method:  
Discharge: 100% rate capacity discharge;  
Charge: Max. Current 0.3CA, constant voltage 2.35-2.4V/Cell;
- ※ Effect of temperature on float charge voltage: -3mV/Cell;

### Contact Us

**Add:** FL.2, No.12 North Ave.1, Industrial Rd. East, Gusan, Guzhen, Zhongshan, Guangdong, China,  
**T:** +86-760- 8862 5562 | **F:** +86-760-8862 5562  
**Email:** [sales@holybattery.com](mailto:sales@holybattery.com) [johny5@126.com](mailto:johny5@126.com)  
**Website:** [www.holybattery.com](http://www.holybattery.com)