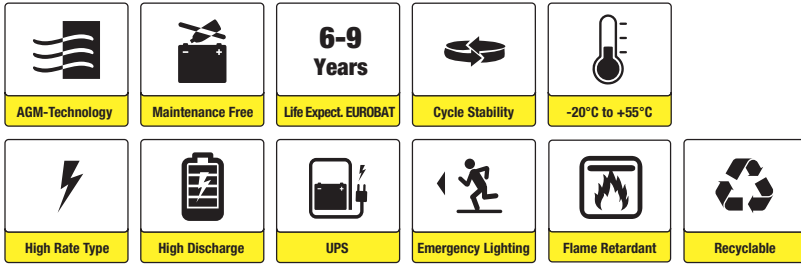




⊕⊖ **sunbattery**®

MB12-5HRV0 (12V5Ah)



Applications

- UPS (High Rate)
- High Power Backup Supply
- Emergency Power Supply
- Emergency Lighting
- Starting Systems
- Power tools
- Electric starting

Certificates



Conform to
IEC60896-21&22

Specifications

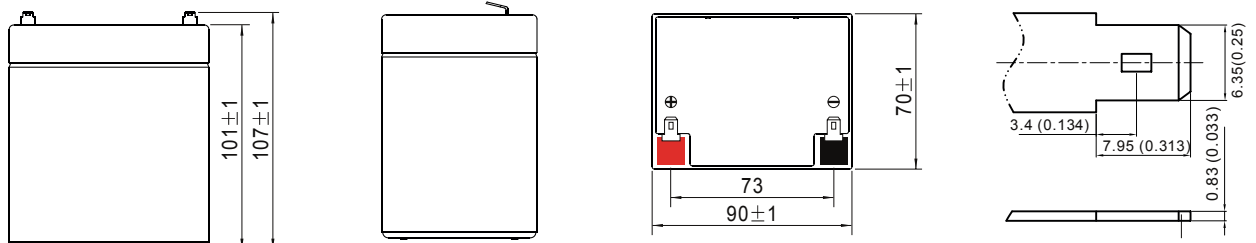
Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Watts (15min Rate)	20.7 Watts at 1.67V/cell	Cycle Use	Initial Charging Current less than 1.62A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	1.80kg	Standby Use	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
Terminal	T2	Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Container Material	ABS UL94 V0	Self Discharge	MB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Rated Capacity (25°C)	5.00Ah/0.50A, 10hr, 1.80V/cell 4.85Ah/0.606A, 8hr, 1.80V/cell 4.47Ah/0.894A, 5hr, 1.75V/cell 4.05Ah/1.35A, 3hr, 1.75V/cell 3.74Ah/3.74A, 1hr, 1.60V/cell	Life Expectancy	6-9 years according to EUROBAT
Max. Discharge Current	81A (5s)		
Internal Resistance / Impedance (1kHz)	Approx. 25mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0-40°C Storage: -15~40°C		



Dimensions

■ T2 Terminal

Unit: mm | Dimensions: 90 Length X 70 Width X 101 Height (107 Height incl. Terminal)





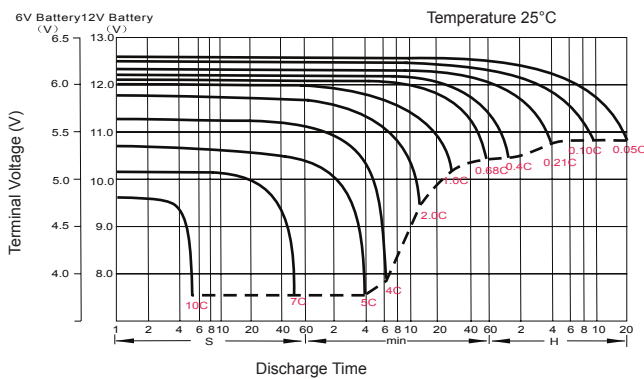
Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.9	12.0	9.35	7.78	5.80	4.21	3.29	1.78	1.27	1.01	0.839	0.728	0.582	0.487	0.265
1.80V/cell	20.2	13.1	10.1	8.27	6.08	4.36	3.41	1.84	1.31	1.03	0.866	0.752	0.606	0.501	0.270
1.75V/cell	22.1	13.9	10.7	8.69	6.32	4.52	3.52	1.90	1.35	1.07	0.894	0.775	0.621	0.514	0.275
1.70V/cell	23.6	14.6	11.2	9.02	6.57	4.66	3.61	1.95	1.39	1.10	0.918	0.794	0.632	0.524	0.279
1.65V/cell	24.7	15.1	11.5	9.30	6.73	4.77	3.68	1.99	1.42	1.12	0.934	0.807	0.640	0.529	0.281
1.60V/cell	25.5	15.5	11.8	9.49	6.83	4.85	3.74	2.02	1.43	1.14	0.946	0.818	0.646	0.534	0.282

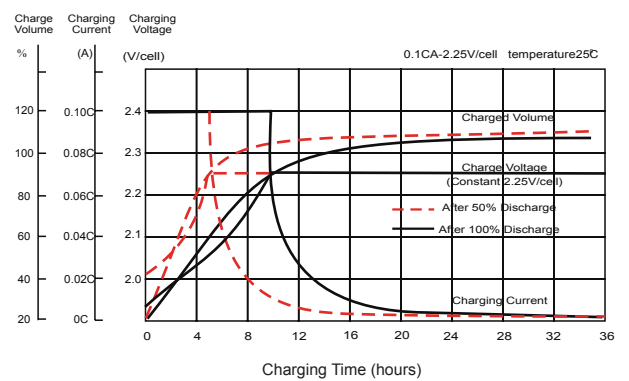
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.5	22.4	17.6	14.7	11.0	8.08	6.35	3.47	2.48	1.97	1.64	1.43	1.15	0.964	0.524
1.80V/cell	36.5	24.1	18.6	15.5	11.5	8.30	6.54	3.55	2.54	2.01	1.69	1.47	1.19	0.989	0.534
1.75V/cell	39.6	25.2	19.6	16.1	11.8	8.56	6.73	3.65	2.61	2.07	1.74	1.51	1.22	1.015	0.544
1.70V/cell	41.7	26.2	20.3	16.6	12.2	8.77	6.88	3.75	2.68	2.13	1.78	1.55	1.24	1.034	0.551
1.65V/cell	43.0	26.7	20.7	16.9	12.4	8.92	6.97	3.81	2.72	2.16	1.81	1.57	1.25	1.043	0.554
1.60V/cell	43.5	27.0	20.8	17.0	12.4	8.99	7.04	3.85	2.74	2.18	1.82	1.58	1.26	1.049	0.556

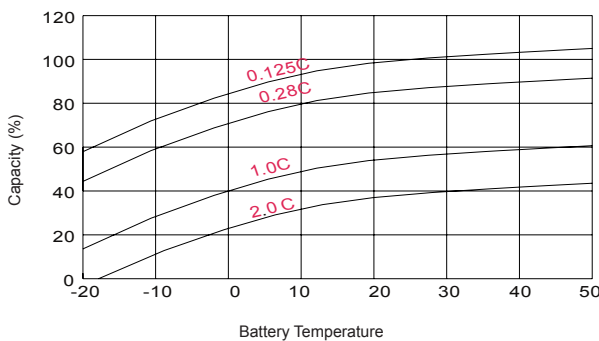
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

