MOTOMA®
Power into the Future

VRLA BATTERY | 12V-55G | 12V55Ah

SLA BATTERY—GEL TECHNOLOGY SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	33Ah@10hr-rate (3.3A to 1.80V/cell @25℃)
Weight	Approx.17.5Kg
Terminal	F21
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	56.0Ah 20hr-rate (2.80A to 1.80V/cell @25℃) 55.0Ah 10hr-rate (5.50A to 1.80V/cell @25℃) 47.8Ah 5hr-rate (9.57A to 1.75V/cell @25℃) 35.0Ah 1hr-rate (35.0A to 1.60V/cell @25℃)
Max. Discharge Current	825A(5sec)
Internal Resistance	Approx.7.0mΩ(Fully charged)
Operating Temp. Range	Discharge: -40℃~60℃ Charge : -20℃~50℃ Storage : -40℃~60℃
Cycle Use	Charging Current:≤6.6A Voltage:14.2V~14.4V Temperature compensation:-30mV/℃
Standby Use	Charging Current:No limit Voltage:13.6V~13.8V Temperature compensation:-20mV/℃
Self-Discharge	less than 1% at 25°C
Design Life	15 years (floating charge)

Introduction

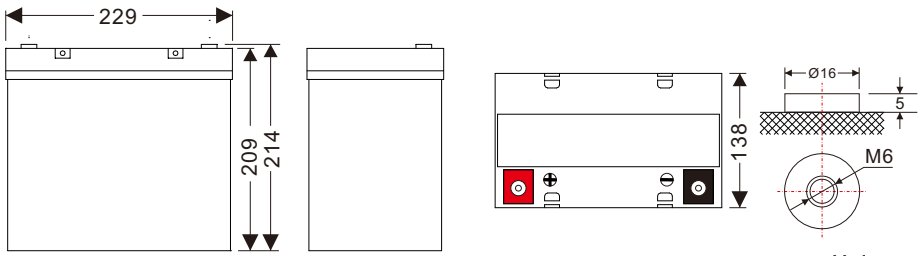
The MOTOMA GEL-TECH batteries designed with 15+ years service life. The SOLID-GEL system can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery-ability after deep discharging. The deep discharge cycles of GEL-TECH batteries can be more than 50% compared with other normal AGM batteries.

Applications

- *Auto control system &ATM machine*
- *Electronic apparatus and equipment*
- *Emergency light & Emergency backup power supply & Alarm/Security system*
- *Power generation system (solar and wind power system,etc.)*
- *Communication power & DC power*
- *Electric Power System(EPS)*
- *Uninterruptable Power System (UPS)*
- .....

Dimensions

Length	229±1mm (9.01 inches)
Width	138±1mm (5.43 inches)
Heigth	209±1mm (8.22 inches)
Total Heigth	214±1mm (6.42 inches)



Unit: mm

Constant Current Discharge Characteristics: A (25℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	189.4	135.7	98.76	62.00	35.04	20.00	14.07	11.64	9.806	6.768	5.723	3.026
1.65V/cell	184.4	129.1	96.73	60.97	34.88	19.85	14.02	11.59	9.749	6.713	5.668	2.971
1.70V/cell	173.7	124.6	95.22	60.43	34.56	19.70	13.91	11.54	9.691	6.658	5.613	2.916
1.75V/cell	156.0	115.0	90.66	58.92	34.23	19.55	13.85	11.43	9.575	6.603	5.558	2.861
1.80V/cell	140.8	104.8	83.57	56.34	33.42	19.20	13.48	11.16	9.402	6.493	5.503	2.806
1.85V/cell	122.6	93.70	74.96	52.78	31.75	18.35	12.88	10.62	8.999	6.218	5.338	2.641

Constant Power Discharge Characteristics: W (25℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	1974	1443	1063	699.6	400.8	230.1	162.4	134.6	113.5	78.54	64.35	33.99
1.65V/cell	1934	1379	1041	690.9	398.8	229.2	162.1	134.2	112.8	78.21	63.69	33.66
1.70V/cell	1825	1333	1027	682.8	395.9	227.1	161.1	133.6	112.5	77.55	63.36	33.33
1.75V/cell	1644	1231	978.8	667.3	392.0	225.0	160.1	132.6	111.4	76.89	62.70	33.00
1.80V/cell	1478	1118	899.3	636.9	382.3	221.7	156.2	129.1	109.7	75.24	62.04	32.67
1.85V/cell	1276	993.0	803.1	596.8	362.3	211.5	148.5	122.9	104.2	72.60	60.06	31.35

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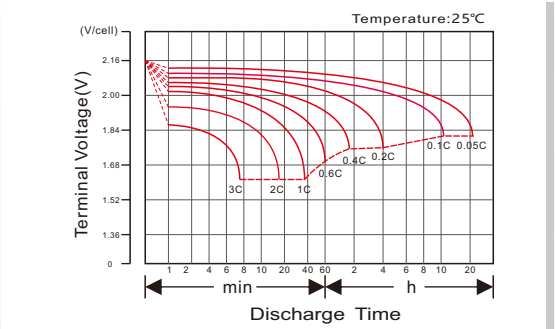
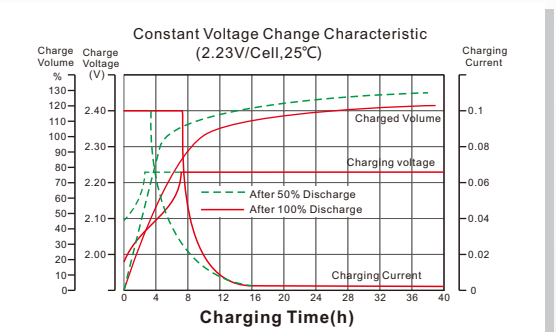
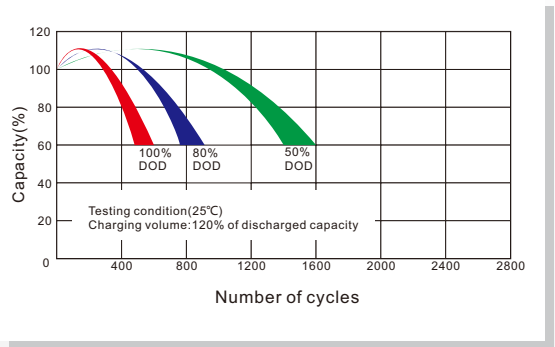
Discharge Characteristics Curve



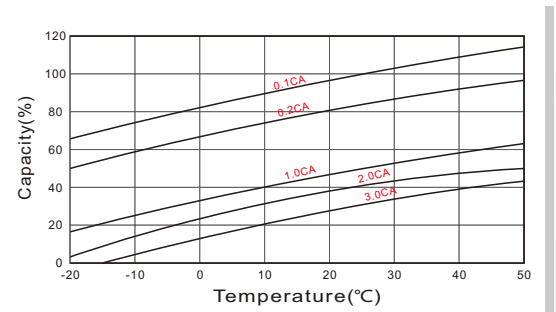
Charging Characteristics Curve



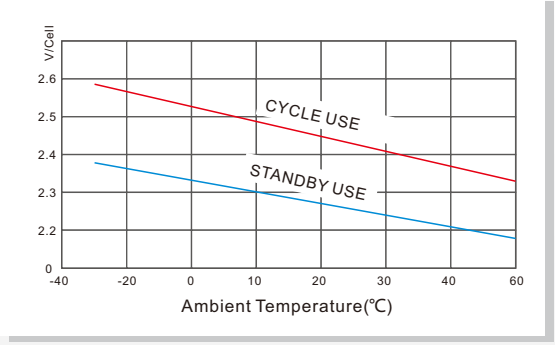
Cycle life in relation to depth of Discharge



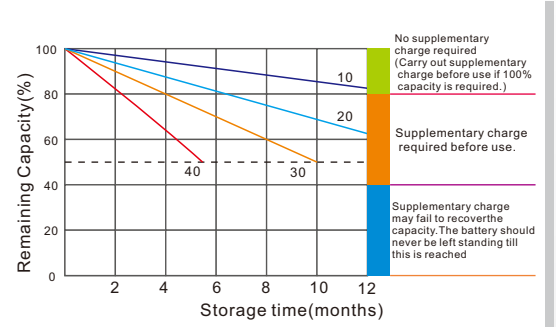
Temperature effects on Capacity



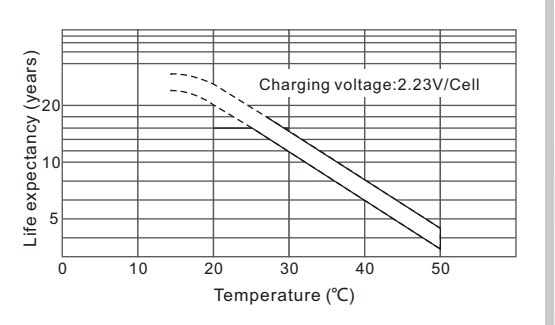
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use