

**Specification**

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	7.0Ah@20hr-rate (0.35A to 1.80V/cell @25°C)
Weight	Approx.2.0Kg
Terminal	F1&F2
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	7.0Ah      20hr-rate (0.35A to 1.80V/cell @25°C)
	6.7Ah      10hr-rate (0.67A to 1.80V/cell @25°C)
	6.1Ah      5hr-rate (1.22A to 1.75V/cell @25°C)
	4.9Ah      1hr-rate (4.9A to 1.60V/cell @25°C)
Max. Discharge Current	105A(5sec)
Internal Resistance	Approx.21mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge    : -10°C~50°C
	Storage   : -20°C~40°C
Cycle Use	Charging Current: ≤2.1A
	Voltage: 14.6V~14.8V
	Temperature compensation: -30mV/°C
Standby Use	Charging Current: No limit
	Voltage: 13.6V~13.8V
	Temperature compensation: -20mV/°C
Self-Discharge	less than 3% at 25°C
Design Life	6 years (floating charge)



**Introduction**

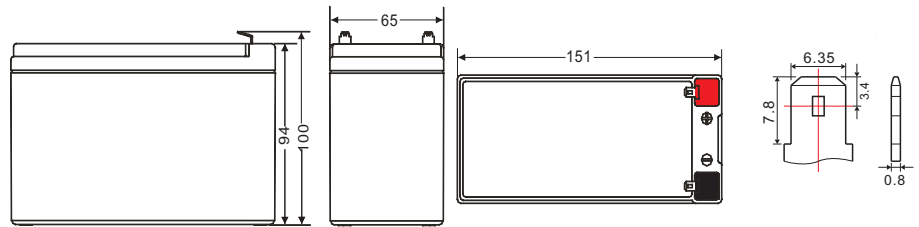
The MOTOMA standard series batteries designed with 6 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better performance in series usage.

**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	151±1mm (5.94 inches)
Width	65±1mm (2.55 inches)
Height	94±1mm (3.70 inches)
Total Height	100±1mm (3.93 inches)



Unit: mm

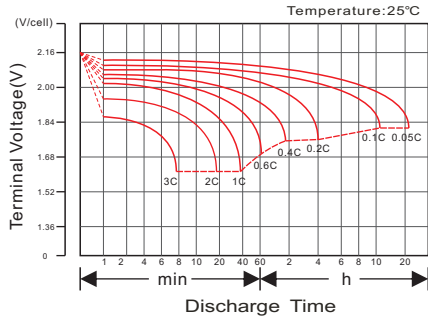
**Constant Current Discharge Characteristics: A (25°C)**

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	28.24	18.87	14.51	8.385	4.961	2.586	1.830	1.501	1.244	0.825	0.715	0.401
1.65V/cell	27.22	18.14	14.05	8.257	4.933	2.567	1.823	1.494	1.237	0.822	0.707	0.386
1.70V/cell	25.75	17.58	13.72	8.192	4.897	2.561	1.816	1.487	1.230	0.819	0.700	0.379
1.75V/cell	23.26	16.45	13.01	8.007	4.825	2.530	1.809	1.480	1.222	0.816	0.693	0.365
1.80V/cell	20.77	15.33	12.29	7.814	4.754	2.487	1.794	1.473	1.215	0.812	0.678	0.350
1.85V/cell	18.31	14.20	11.57	7.621	4.690	2.449	1.780	1.465	1.208	0.809	0.671	0.343

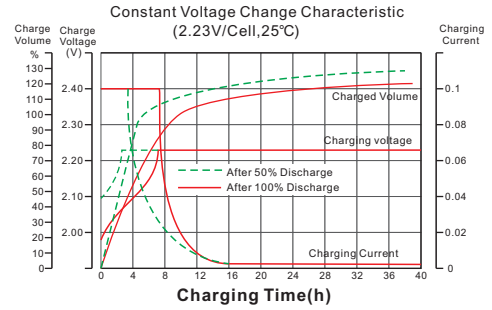
**Constant Power Discharge Characteristics: W (25°C)**

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	308.8	200.7	163.1	100.6	59.49	30.99	21.92	17.93	17.54	9.924	8.448	4.722
1.65V/cell	300.8	200.5	160.8	99.00	59.32	30.81	21.88	17.89	17.41	9.844	8.361	4.549
1.70V/cell	294.8	194.5	157.1	98.35	59.19	30.73	21.83	17.89	17.36	9.831	8.274	4.462
1.75V/cell	266.4	186.5	148.9	95.99	58.21	30.25	21.70	17.76	17.32	9.805	8.188	4.289
1.80V/cell	237.9	174.5	140.7	93.72	57.22	29.84	21.53	17.63	17.27	9.765	8.058	4.159
1.85V/cell	209.5	162.4	132.5	91.45	56.23	29.39	21.36	17.50	17.23	9.765	7.928	4.029

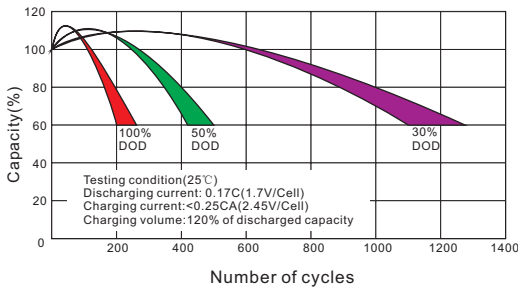
**Discharge Characteristics Curve**



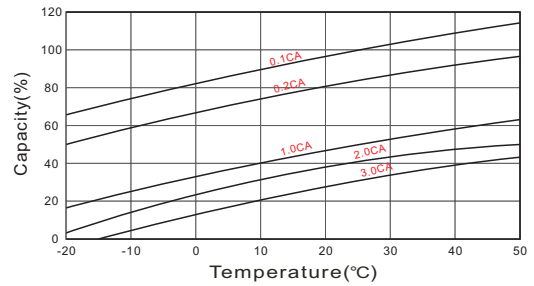
**Charging Characteristics Curve**



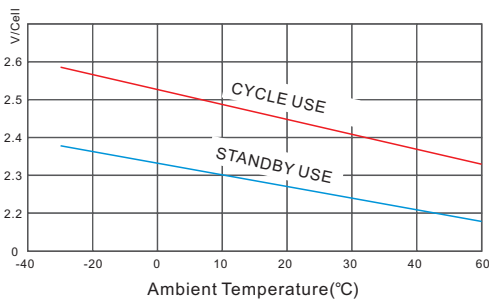
**Cycle life in relation to depth of Discharge**



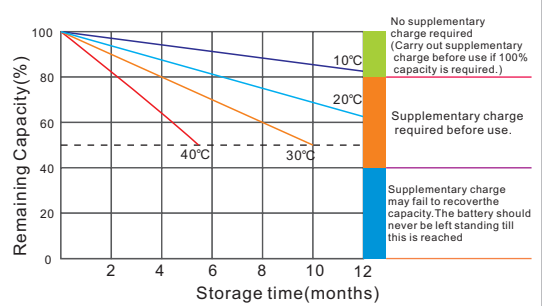
**Temperature effects on Capacity**



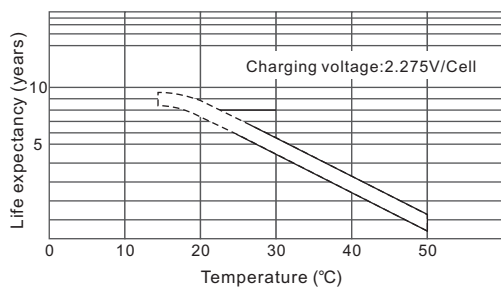
**Relationship between charging voltage and temperature**



**Self-discharge Characteristics**



**Temperature effects on Float life**



**Life Characteristics of Standby use**

