SunStonePower

www.sunstonepower.com
Sunstone Power Industry Co.,ltd

MLG12-50 (12V50AH)

Features

- Maintenance-free operation
- Compact design
- Stable quality and high reliability
- 12 years design time (at 25℃)

Application

- Telecommunication system
- Alarm and security system
- Backup power for testing and measuring instruments
- UPS
- Emergency lighting
- Fire alarm and security systems
- Auto control system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Telecomunication system

Specifcations

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15 －50℃ (5－122℉)
Nominal Capacity	53.2AH (20hr, 1.80V/cell, 25 ℃/76℉)		Charge : 0 －40℃ (32－104℉)
	50AH (10hr, 1.80V/cell, 25 ℃/77℉)		Storage : -15 －40℃ (5－104℉)
	42.5AH (5hr, 1.75V/cell, 25℃/77℉)	Nominal Operating Temp.Range	25 ± 3℃ (77± 5℉)
	30AH (1hr, 1.60V/cell, 25 ℃/77℉)	Cycle Use	14.4~14.8V (25℃/77℉) Temp.Coefcient -30mV/ ℃
Dimension	Length 228± 2mm		Initial Charging Current Less than 16.5A
	Width 137± 2mm	Standby Use	13.5~13.8V (25℃/77℉) Temp.Coefcient -20mV/ ℃
	Container Height 210± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 216± 2mm	Capacity affected by Temperature	40℃ (104℉) 103%
Approx Weight	Approx 16.4Kg		25℃ (77℉) 100%
Terminal	T3 or F5		0℃ (32℉) 86%
Container Material	ABS	Self Discharge	SunstoneMLG series batteries may be stored for up to 9 months
Max. Discharge Current	550A (5S)		at 25℃ (77℉) and then a freshening charge is required.
Internal Resistance	Approx 8.0mΩ		For higher temperatures the time interval will be shorter.

Constant current discharge (amperes at 25°/77℉)

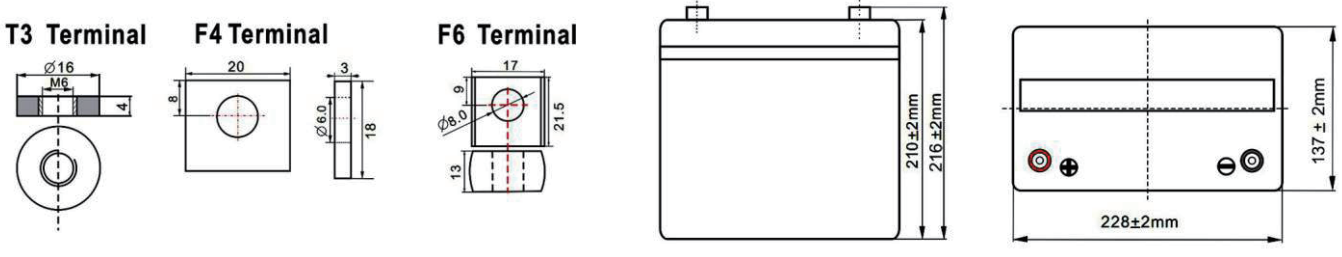
F.V/time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	121.87	87.78	71.53	44.63	34.29	28.36	16.82	12.63	8.69	5.10	2.68
1.75V/cell	133.10	96.35	77.64	46.50	35.57	29.25	17.30	12.94	8.89	5.20	2.72
1.70V/cell	143.94	102.96	83.84	48.08	36.75	30.10	17.77	13.23	9.04	5.26	2.75
1.65V/cell	155.17	109.75	88.57	50.64	38.33	31.29	18.28	13.61	9.23	5.31	2.79
1.60V/cell	165.91	117.34	92.61	52.91	39.70	32.34	18.79	13.83	9.40	5.37	2.81

Constant power discharge(watts per cell at 25 ℃/77℉)

F.V/time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	227.98	160.79	135.76	83.84	65.22	55.22	32.37	24.49	17.16	10.13	5.29
1.75V/cell	242.27	172.32	142.56	87.19	67.88	56.47	33.24	25.01	17.43	10.26	5.37
1.70V/cell	256.26	181.38	149.95	90.15	70.05	57.26	34.03	25.50	17.62	10.33	5.42
1.65V/cell	276.26	189.75	155.57	95.07	72.12	59.14	34.75	25.97	18.00	10.40	5.47
1.60V/cell	292.02	197.54	162.27	98.03	73.99	60.99	35.44	26.46	18.25	10.48	5.52

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unitimm[inches]



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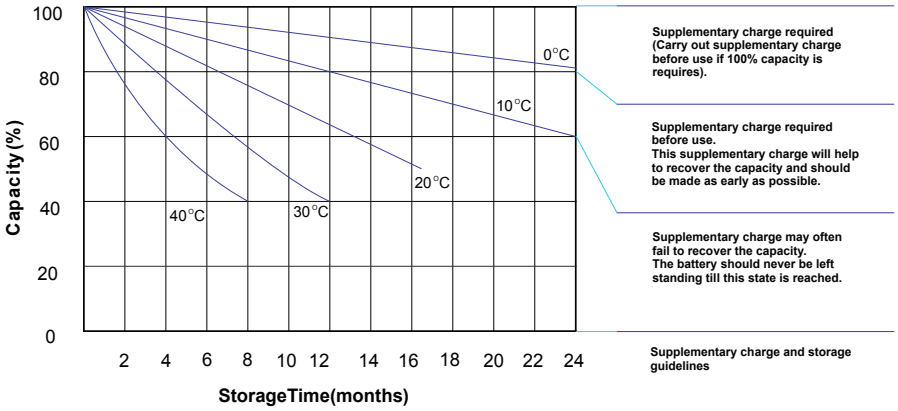
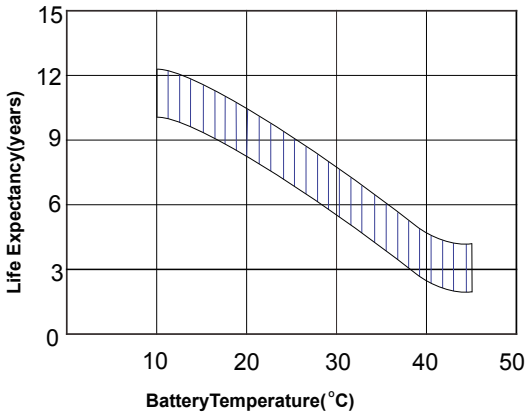
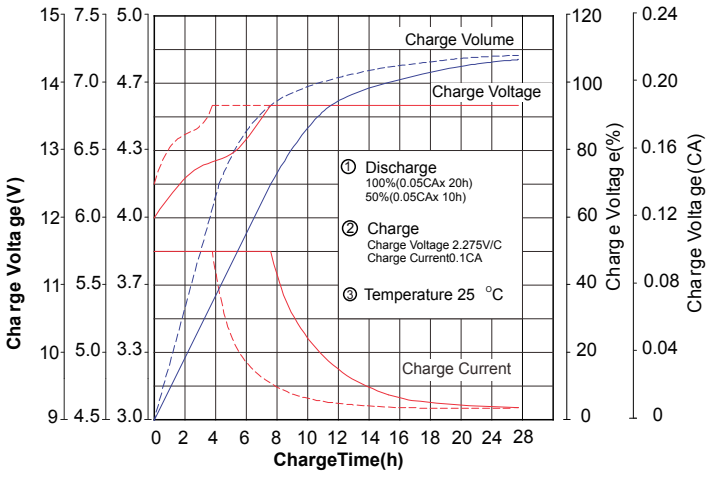
Storage characteristics



Effect of temperature on long term ☒oat life

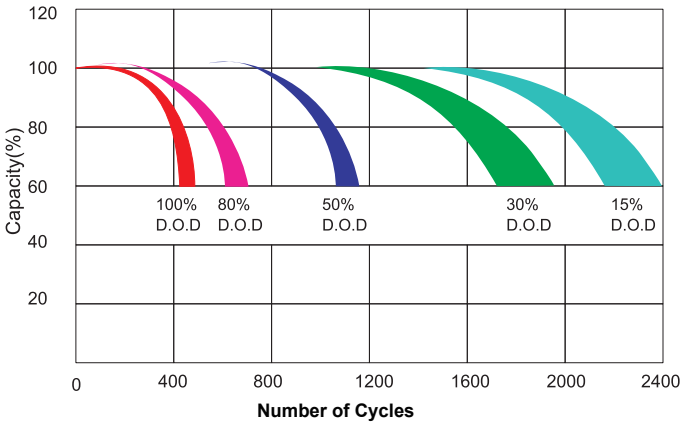


Charge characteristics Curve for standby use

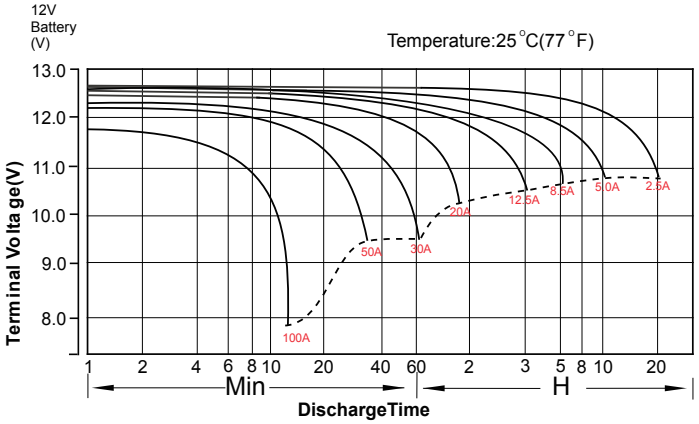


Cycle Life in Relation to Depth of Discharge

Testing condition
Discharging: current 0.17C(FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume:125% of discharged capacity.



Discharge characteristics Curve



Temperature Effects in Relation to Battery Capacity