

MLG12-50 (12V50AH)

Features

Maintenance-free operation
Compact design

Stable quality and high reliability
12 years design time (at 25°C)



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
- Telecommunication system

Specifications

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

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

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

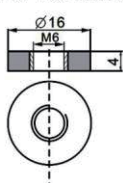
Constant power discharge(watts per cell at 25 °C/77°F)

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

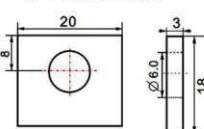
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unitimm[inches]

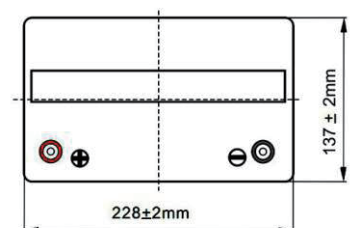
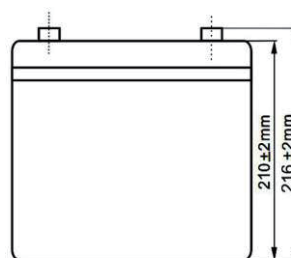
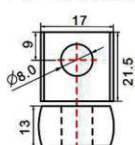
T3 Terminal



F4 Terminal

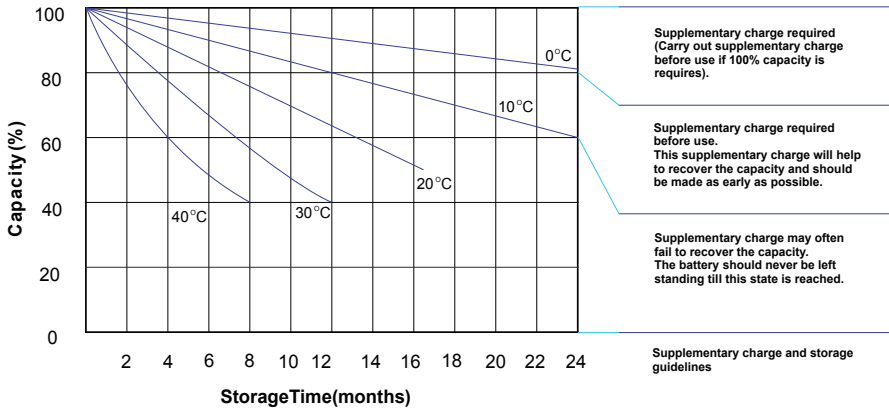


F6 Terminal

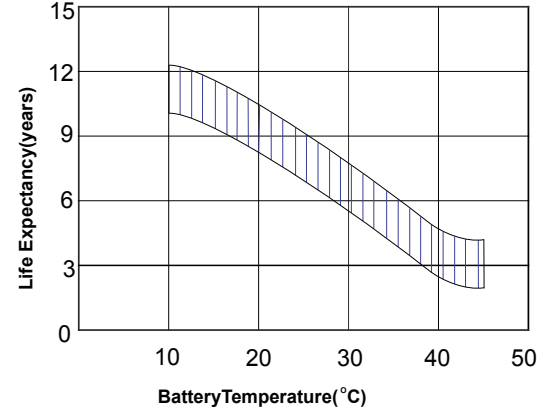


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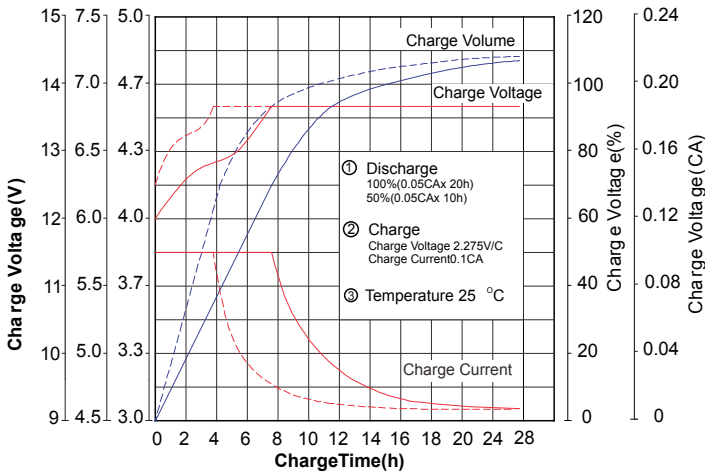
Storage characteristics



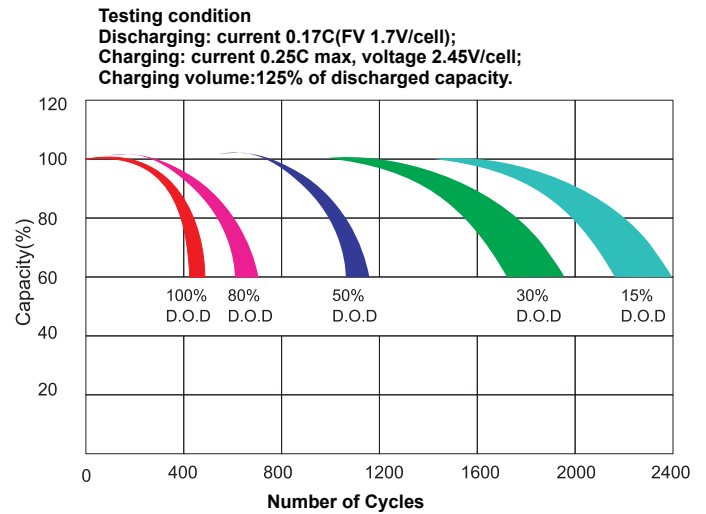
Effect of temperature on long term float life



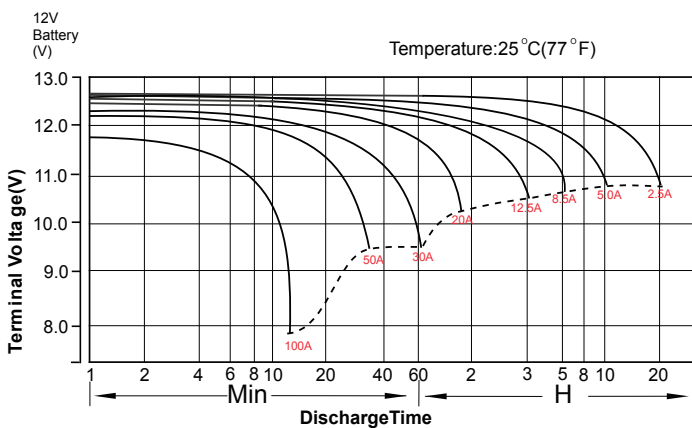
Charge characteristics Curve for standby use



Cycle Life in Relation to Depth of Discharge



Discharge characteristics Curve



Temperature Effects in Relation to Battery Capacity

