

ML12-44 (12V44AH C10 @25°C)

Features

- § Maintenance-free operation
- § Compact design
- § ABS case, Flame Retardant V0 is available

- § Stable quality and high reliability
- § 10 years design life (at 25°C)



Application

- § Telecommunication system
- § Alarm and security system
- § Backup power

- § UPS
- § Emergency lighting
- § Auto control system

- § Electronic apparatus and equipment
- § Communication power supply
- § DC power supply

Specification

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15~50°C (5~122°F)
Nominal Capacity	46.6AH (20hr, 1.80V/cell, 25°C/77°F)		Charge:0~40°C (32~104°F)
	44.0AH (10hr, 1.80V/cell, 25°C/77°F)	Nominal Operating Temp.Range	Storage: -15~40°C (5~104°F)
	38.7AH (5hr, 1.75V/cell, 25°C/77°F)		25 ± 3°C (77 ± 5°F)
	27.0AH (1hr, 1.60V/cell, 25°C/77°F)	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
Dimension	Length 197 ± 2mm	Standby Use	Initial Charging Current Less than 13.5A
	Width 165 ± 2mm		13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C
	Container Height 170 ± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 170 ± 2mm	Capacity affected by Temperature	40°C (104°F) 103%
Approx Weight	Approx 13.6Kg		25°C (77°F) 100%
Terminal	T6		0°C (32°F) 86%
Container Material	ABS	Self Discharge	ML series batteries may be stored for up to 6 months
Max. Discharge Current	560A (5S)		At 25°C (77°F) and then a freshening charge is required.
Internal Resistance	Approx 9mΩ		For higher temperatures the time interval will be shorter.

Constant Current Discharge (Amperes at 25°C/77°F)

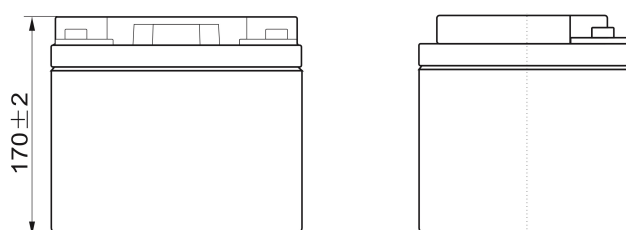
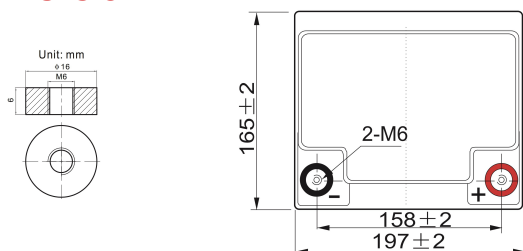
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	109.1	79.0	64.3	40.2	30.4	25.46	14.91	11.19	7.59	4.50	2.31
1.75V/cell	119.2	84.7	69.8	41.7	31.7	26.27	15.33	11.47	7.76	4.56	2.35
1.70V/cell	128.9	92.9	75.4	43.2	32.6	27.04	15.76	11.73	7.90	4.62	2.37
1.65V/cell	140.2	100.8	79.8	45.3	33.9	28.07	16.20	12.07	8.07	4.66	2.40
1.60V/cell	148.8	106.0	83.5	46.9	35.3	27.97	16.65	12.27	8.23	4.72	2.43

Constant Power Discharge (Watts per cell at 25°C/77°F)

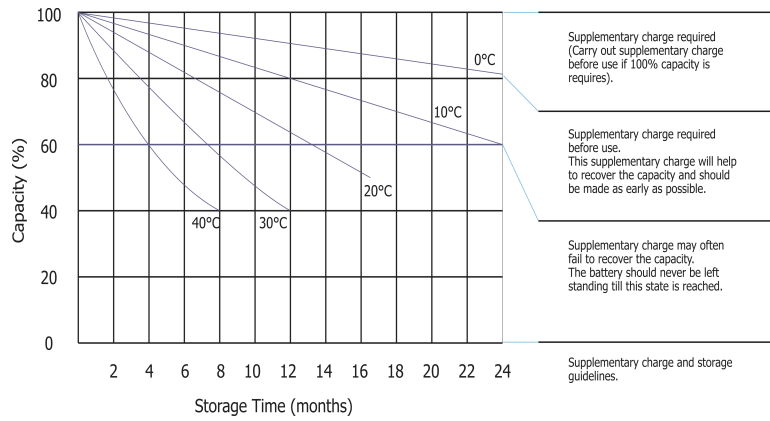
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	206.0	146.8	120.7	76.6	58.3	47.00	28.70	21.71	14.79	8.82	4.53
1.75V/cell	221.3	157.4	129.2	78.8	60.2	48.17	29.47	22.17	15.15	8.94	4.60
1.70V/cell	232.8	165.6	136.4	82.2	61.5	48.88	30.17	22.61	15.43	9.06	4.66
1.65V/cell	243.8	173.4	140.5	85.9	62.8	50.47	30.81	23.03	15.71	9.15	4.72
1.60V/cell	257.6	180.4	146.6	88.6	64.6	52.18	31.43	23.46	16.01	9.23	4.78

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

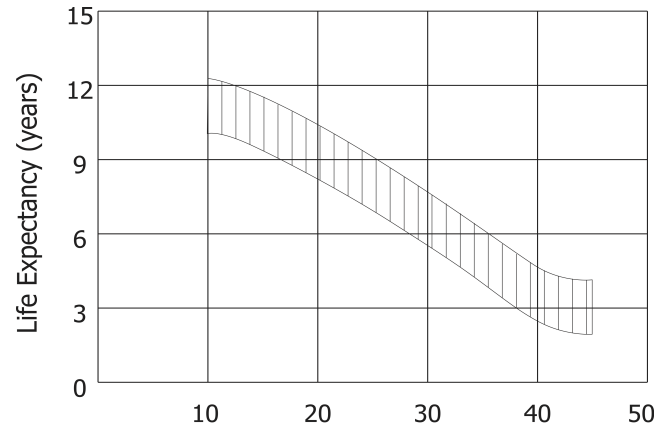
Dimension



Storage Characteristics



Effect Of Temperature On Float Life



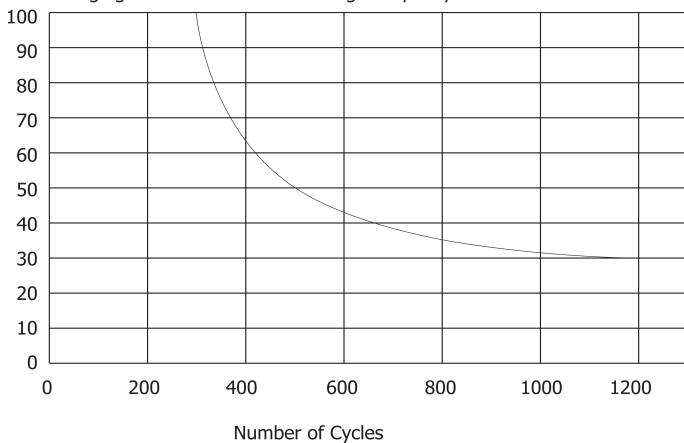
Cycle Life With Depth Of Discharge (D.O.D.)

Testing condition

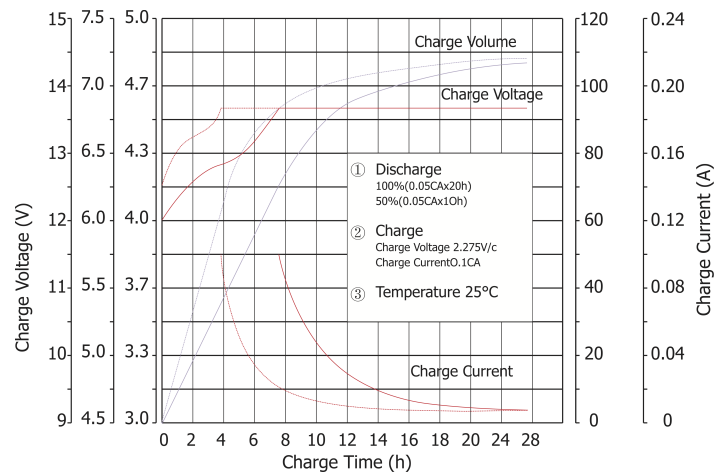
Discharging: current 0.17C (FV 1.7V/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

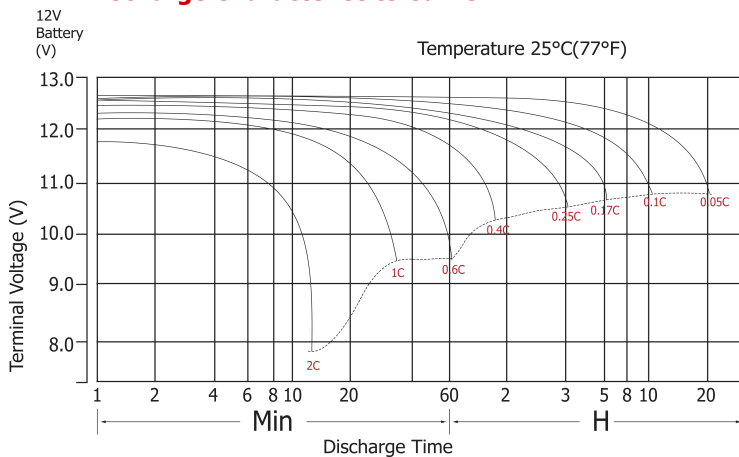
Charging volume: 125% of discharged capacity



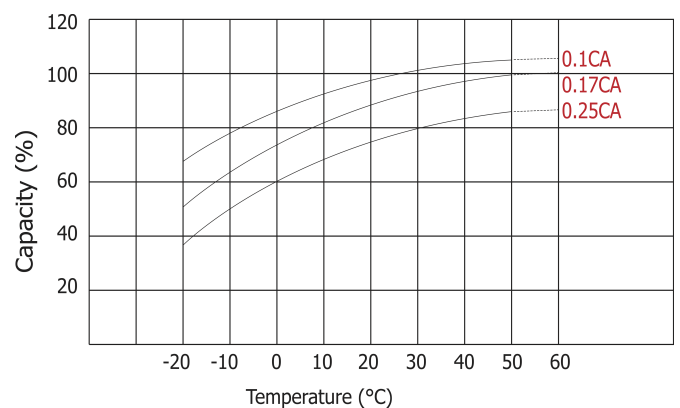
Charge Characteristics Curve For Standby Use



Discharge Characteristics Curve



Temperature Effects With Capacity



Certificates

