MLAA

Rechargeable Lithium Battery



www.marvel-tech.ca
info@marvel-battery.com

MLAA

Rechargeable Lithium Battery

Basic Performance

Battery parameters

Model Number		MLAA
Material		Lithium
Nominal Voltage		1.5V
Rated Capacity	Typical Capacity	2100mAh
	Minimum Capacity	2100mAh
Rated Energy	Typical Energy	3150mWh
	Minimum Energy	3150mWh
Dimension	Diameter（d1）	Max 14.5mm
	Height (h1)	Max 51.0mm
Weight	19.0±1g	
Charge	Charging Method	Type-C cable
	Charging Voltage	5V
	Charging Current	350mA
	Charging Time	2.5 hours ±0.5
	LED Indicators LED	Blink when charging,Stay on when full charged
Discharge	Discharging Current	360mA
	Cutoff Voltage	1.1V
Maximum Continuous Discharge Current		1500mA
Protection	short-circuited	Yes
	over-flowed	Yes
	over-charged	Yes
	over-discharged	Yes
Working Temperature	Charge	0~45℃/65±20%RH
	Discharge	-20~60℃/65±20%RH

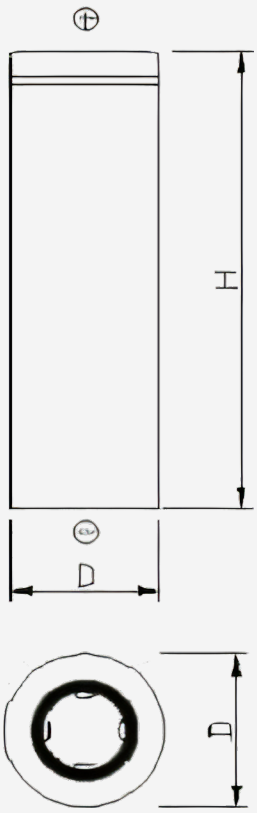
www.marvel-tech.ca
info@marvel-battery.com

MLAA

Rechargeable Lithium Battery

Cell parameters

Model Number		MLAA
Material		Lithium
Nominal Voltage		3.7V (Min 2.5V, Max 4.2V)
Rated Capacity	Typical	1100mAh
	tolerance	±50mAh
Dimension	Diameter	14.0±0.3mm
	Height	42.9±0.3mm
Weight		14.5±1g
Internal Impedance at 1000Hz		≤60mΩ (full charge)
Charge	Standard	0.2C(220mA)@4.20V
	Rapid	1C(1100mA)@4.20V
Discharge	Standard	0.2C(220mA)@2.5V
	Rapid	1C(1100mA)@2.5V
Maximum Continuous Discharge Current		1C(1100mA)@2.5V
Operation Temperature Range	Charge	0~45℃/65±20%RH
	Discharge	-20~60℃/65±20%RH
Storage Temperature Range	Less than 1year	15~35℃/65±20%RH
	Less than 3 months 3	0~40℃/65±20%RH



www.marvel-tech.ca
info@marvel-battery.com

Test Requirement

1 Standard environmental conditions (unless specifically requested，trials should be conducted under standard atmospheric conditions).

Standard temperature： 25±3℃;
Atmospheric pressure： 86kPa~106 kPa;
Standard humidity： 65±20%

2 Standard Charge : Under standard environmental conditions ,the product is charged by 5V 360mA until LED stay on.

3 Standard Discharge：The product is discharge to the termination voltage 1.1V by 360mA current。

Electrochemical Performance

NO.	Item	Testing method	Standard
1	Discharge Capacity	Standard environmental conditions, standard discharge 360mA after Standard charge.	≥2100mAh
2	Life cycle	Temperature:25±3℃ Charge:360mA to LED stay on. Discharge: 360mA to 1.1V higher than 60% of the Initial capacity.	≥1000 cycle
3	Self discharge	When the battery has been completely standard charged, it shall be disconnected and put aside for 28 Days at (25±3)℃, then discharged at 360mA.	Discharging shall not be less than 4.2 hours

Picture of battery

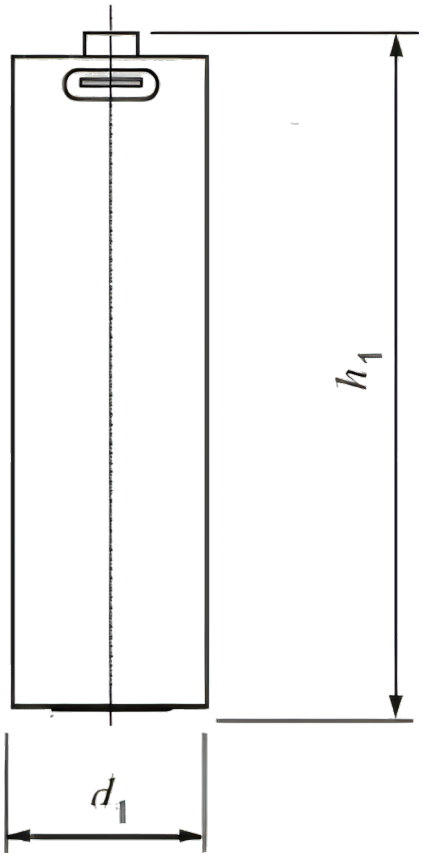


Fig.（1）The Dimension of PACK

d1	Max 14.5	h1	Max 51.0
PCM/		UNIT	mm