

Power-Xtra CR2032 - 3V Lithium Li-MnO₂ Battery - 5 pcs/blister

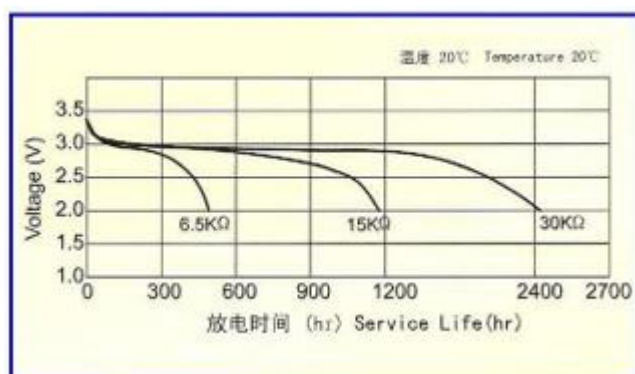
SPECIFICATIONS OF SINGLE CELL

Type	Li-MnO ₂ Buton with 5 pcs/blister
Stock Code	900.600.503.244
Model	CR2032, CR-2032, CR2032

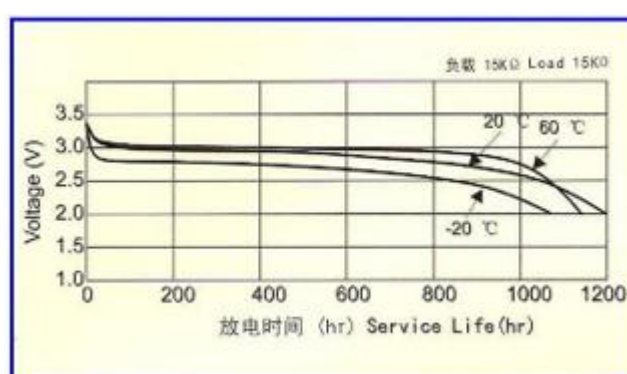
TECHNICAL INFORMATION

Item	Specifications	Conditions
Nominal Voltage	3.0V	
Typical Capacity	220 mAh	Standard discharge with load 15k Ω
Instantaneous short-circuit current	≥ 250 mA	Time ≤ 0.5 second
Off-load voltage	≥ 3.20 V	No load
Service Output - Initial	1180 h	Continuous discharge with load 15k Ω , till 2.0v end-voltage, Temperature 20-25°C, under the condition of related humidity $\leq 75\%$ RH
Service Output - After 12 months storage	1110 h	
Typical Weight	2.75 gr	
Recommended Storage Temperature Range	20+/-2°C	5 years after delivery under proper storage conditions.
Recommended Operation Temperature Range	-20° C to 60°C	
Shelf Life	3-5 Years	Recommended Storage Range : 20+/-2°C Recommended Humidity Range : 65+/-20%RH

Discharge Characteristics

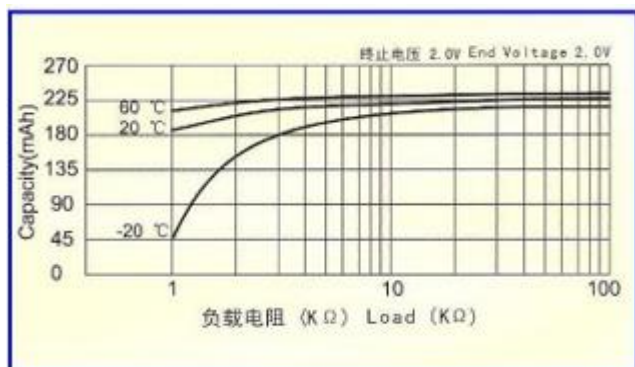


Temperature Characteristics

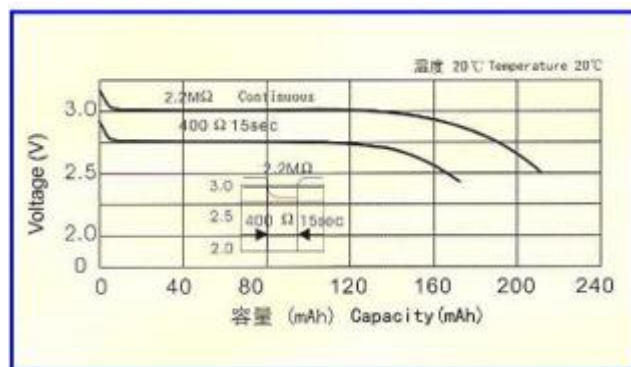


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Load Capacity



Pulse Discharge Characteristics



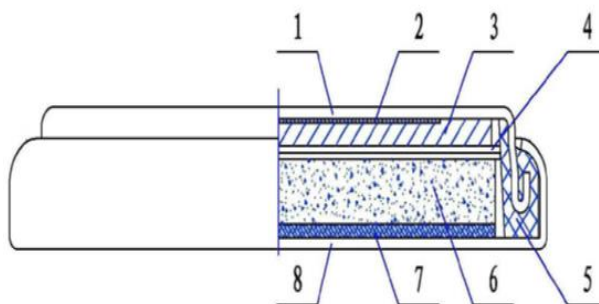
TECHNICAL INFORMATION

Item	Test Methods	STANDARD	
Dimension	Using vernier caliper (accuracy \geq 0.02) while avoiding short-circuit	Diameter	20.0 (-0.20) mm
		Height	3.2 (\pm 0.1) mm
Off-load voltage	Using multimeter (accuracy \geq 0.25%) internal resistance \geq 1MΩ	\geq 3.20v	
Instantaneous short-circuit current	Time of short-circuit should be less than 0.5 second and avoid repeated test within half an hour	\geq 250 mA	
Appearance	Eyeballing	Bright, clean, no rust, no leakage, And no flaw	
Capacity	Continuously discharge for with load 15kΩ, temperature at 20~25°C, humidity at 65 \pm 20% till 2.0v end-voltage (for fresh battery only; within 3 months)	\geq 1180 h	
Vibration test	Put battery on the platform of the vibrations machine, start the machine and adjust the frequency form 10 times per minute to 15 times per minute. keep it running for an hour	Characteristics keep stability	
Leakage at high temperature test	Stored under temperature (50°C) for 10 days	No leakage allowed	
Over discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No leakage allowed	

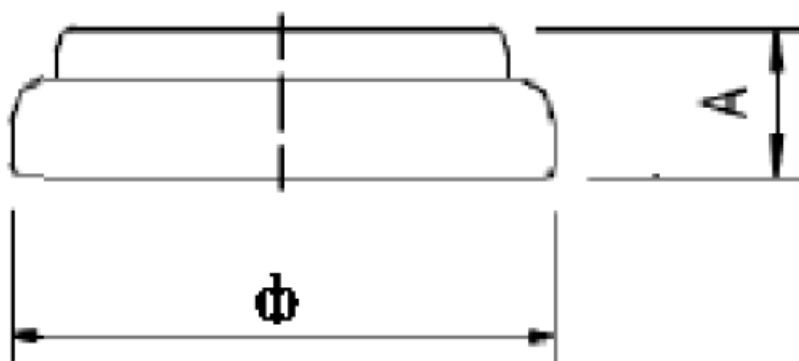
Image and Technical Drawings



Cutaway Diagram of 3.0V Lithium Manganese Dioxide Button Cell



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|-----------------|-----------------------------|------------------------------|---------------|
| 1、负极壳 | 2、负极集流网 | 3、负极锂片 | 4、隔膜 |
| 5、密封胶圈 | 6、正极片 | 7、正极集流网 | 8、正极壳 |
| 1、Cathode Shell | 2、Cathode collector net | 3、Cathode (slice of lithium) | 4、Septum |
| 5、Gasket | 6、Anode(MnO ₂) | 7、Anode collector net | 8、Anode shell |



$$\Phi = 20.0 (-0.2) \text{ mm} \quad A = 3.2 (\pm 0.1) \text{ mm}$$