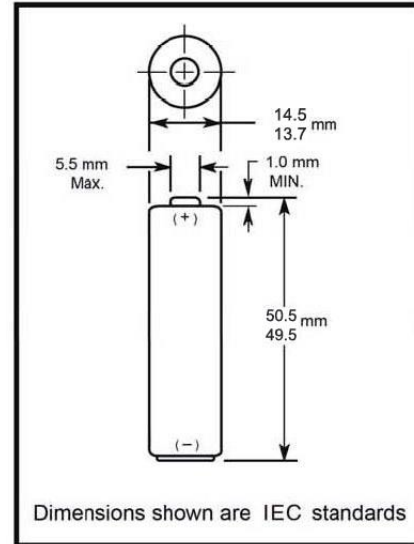


## LR6 (D9+) MERCURY FREE ALKALINE MANGANESE BATTERY SPECIFICATION

### 1. ESSENTIAL PARAMETER

|                               |   |
|-------------------------------|---|
| <b>Model</b>                  | IEC: LR6<br>ANSI: AA  |
| <b>Electrochemical System</b> | Zinc/ MnO <sub>2</sub>  |
| <b>Nominal Weight</b>         | 23 ± 1g   |
| <b>Nominal Voltage</b>        | 1.5V  |
| <b>Working Temperature</b>    | -20°C~54°C  |
| <b>Shelf Life (20°C)</b>      | 7 years   |
| <b>Packaging and Mark</b>     | PET label (aluminum jacket)<br>marked with expiry date        |
| <b>Hazardous Substance</b>    | Hg Content < 1ppm<br>Cd Content < 20ppm<br>Pb Content < 40ppm |
| <b>Reference Standard</b>     | IEC 60086<br>GB/T 8897.2<br>2006/66/EC                        |



### 2. ELECTRICAL CHARACTERISTICS (10Ω, 0.8s, 20±2°C, RH:55±20%)

| /                                 | <b>OCV (V)</b><br>Open-circuit Voltage | <b>CCV (V)</b><br>Closed-circuit Voltage | <b>SC (A)</b><br>Short-circuit Current |
|-----------------------------------|--|--|--|
| <b>Standard Value (Initially)</b> | ≥1.60                                  | ≥1.50                                    | ≥7.0                                   |

### 3. DISCHARGE PERFORMANCE (20±2°C, RH: 55±20%)

| <b>Discharge Pattern</b>                                   | <b>Appliances (simulating)</b> | <b>End Voltage</b> | <b>Unit</b> | <b>Standard Value (Initially)</b> | <b>Actual Level (Initially)</b> |
|--|--------------------------------|--------------------|-------------|-----------------------------------|---------------------------------|
| 1500mW - 2s, 650mW - 28s<br>repeat 10 times(5min) per hour | Digital camera                 | 1.05 V             | pulse       | 75                                | 100                             |
| 250mA - 1h/day   | CD/ Electronic games           | 0.9 V              | min         | 460                               | 486                             |
| 100mA - 1h/day   | Digital audio                  | 0.9 V              | hour        | 22.5                              | 24.5                            |
| 3.9Ω - 1h /day   | Motor/ Toy                     | 0.8 V              | min         | 430                               | 460                             |
| 50mA – 1h/8h, 24h/day                                      | Remote controller              | 0.9 V              | hour        | 47                                | 51                              |
| 3.9Ω – 4min/h, 8h/day                                      | LED portable lighting          | 0.9 V              | min         | 396                               | 432                             |

#### 4. ANTI-LEAKAGE PERFORMANCE

| No. | Test Item                          | Test Method (IEC Standard)   | Sample QTY. | Standard Value (Initially) |
|-----|------------------------------------|--|-------------|----------------------------|
| 1   | High Temperature Anti-leakage Test | Store the battery (batteries) under an environmental condition of Temp.60±2°C and RH: 90±5% for certain days, then put them under normal atmospheric temperature for 4~24 hours. | 10 pcs      | No leakage within 50 days  |

#### 5. SECURITY CHARACTERISTICS (Environment Temp.20±2°C, RH.55±20%)

| No. | Security Test Item               | Test Method  | Sample QTY. | Specification Standard |
|-----|----------------------------------|--------------|-------------|------------------------|
| 1   | Over discharge Anti-leakage Test | IEC Standard | 5 pcs       | No explosion           |
| 2   | External Short-Circuit           | IEC Standard | 5 pcs       | No explosion           |
| 3   | Improper Installation            | IEC Standard | 5 groups    | No explosion           |
| 4   | Free Drop Test                   | IEC Standard | 5 pcs       | No explosion           |

#### 6. USAGE GUIDE (Please refer to IEC60086.5 for detailed safety and storage specifications.)

- (1) Insert batteries correctly with regard to the polarities (“+”/“-”) marked on the battery and the electrical appliances;
- (2) Do not short-circuit, recharge, heat, disassemble the battery, or dispose of in fire;
- (3) Do not mix use old batteries with new ones, or mix use batteries of different types or brands;
- (4) Exhausted batteries should be immediately removed from the equipment;
- (5) Keep the batteries away from small children; do not let the child remove/ replace batteries without monitoring from adults.
- (6) Storage condition of the batteries shall be Temperature: 15°C~25°C (no higher than 30°C), while extremely damp environment beyond RH: 40%~90% shall also be avoided. Naked battery is recommended to be stored after being labeled.