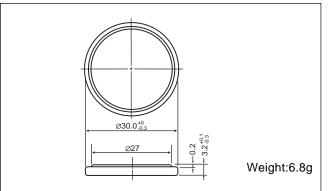
Manganese Dioxide Lithium Coin Batteries: Individual Specifications

CR3032

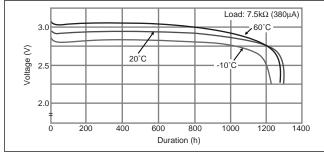
Dimensions(mm)



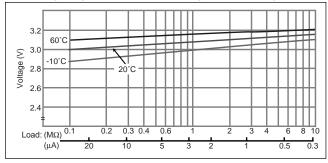
Specification

| Nominal voltage (V) | 3 |
|-------------------------------|-----------|
| Nominal capacity (mAh) | 500 |
| Continuous standard load (mA) | 0.2 |
| Operating temperature (C) | -30 ~ +60 |

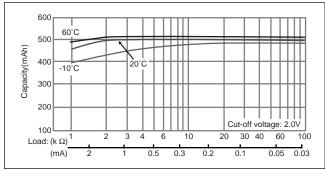
Temperature Characteristics



Operating voltage vs. load resistance (voltage at 50% discharge depth)



Capacity vs. load resistance



Panasonic

LITHIUM HANDBOOK

AUGUST 2005

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact Panasonic for the latest information.

Coin Type Lithium Batteries

Manganese Dioxide Lithium Batteries (CR Series)

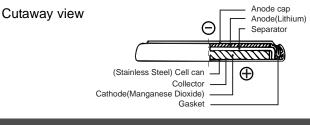




Features

As with the BR series of coin-type lithium batteries, these batteries feature a high energy density, and they were developed and commercialized via Panasonic's extensive experience and battery technology. These batteries have proven to be especially useful in equipment requiring relatively high currents.

Construction



Applications

Calculators

Cameras

Compact, low power consuming cordless appliances

Electronic watches (digital and analog)

Memory backup

IC card



Note: Always confirm that the battery to be used is suitable for the intended application before purchase and/or use.

General Specifications

| Model No. | Electrical Characteristics (20°C) | | | Dimensions (mm) | | Maight (g) | JIS | IEC |
|-----------|-----------------------------------|-------------------------|-----------------------|-----------------|--------|------------|--------|--------|
| model No. | Nominal Voltage (V) | *Nominal Capacity (mAh) | Continuous Drain (mA) | Diameter | Height | Weight (g) | 515 | IEC |
| CR1025 | 3 | 30 | 0.1 | 10.0 | 2.5 | 0.7 | CR1025 | CR1025 |
| CR1216 | 3 | 25 | 0.1 | 12.5 | 1.6 | 0.7 | CR1216 | CR1216 |
| CR1220 | 3 | 35 | 0.1 | 12.5 | 2.0 | 1.2 | CR1220 | CR1220 |
| CR1612 | 3 | 41 | 0.1 | 16.0 | 1.2 | 0.8 | CR1620 | - |
| CR1616 | 3 | 55 | 0.1 | 16.0 | 1.6 | 1.2 | CR1616 | CR1616 |
| CR1620 | 3 | 75 | 0.1 | 16.0 | 2.0 | 1.3 | - | CR1620 |
| CR1632 | 3 | 140 | 0.1 | 16.0 | 3.2 | 1.8 | - | - |
| CR2012 | 3 | 55 | 0.1 | 20.0 | 1.2 | 1.4 | CR2012 | CR2012 |
| CR2016 | 3 | 90 | 0.1 | 20.0 | 1.6 | 1.6 | CR2016 | CR2016 |
| CR2025 | 3 | 165 | 0.2 | 20.0 | 2.5 | 2.3 | CR2025 | CR2025 |
| CR2032 | 3 | 225 | 0.2 | 20.0 | 3.2 | 2.9 | CR2032 | CR2032 |
| CR2330 | 3 | 265 | 0.2 | 23.0 | 3.0 | 3.8 | CR2330 | CR2330 |
| CR2354 | 3 | 560 | 0.2 | 23.0 | 5.4 | 5.8 | CR2354 | CR2354 |
| CR2412 | 3 | 100 | 0.2 | 24.5 | 1.2 | 2.0 | - | - |
| CR2450 | 3 | 620 | 0.2 | 24.5 | 5.0 | 6.3 | CR2450 | CR2450 |
| CR2477 | 3 | 1000 | 0.2 | 24.5 | 7.7 | 10.5 | - | - |
| CR3032 | 3 | 500 | 0.2 | 30.0 | 3.2 | 6.8 | - | CR3032 |

* Nominal capacity shown above is based on standard drain and cut off voltage down to 2.0V at 20°C

Panasonic

LITHIUM HANDBOOK

AUGUST 2005

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact Panasonic for the latest information.