**PRODUCTS**

**INDUSTRIAL SOLUTIONS**

**LITHIUM - Cylindrical Type**

Panasonic Cylindrical Lithium Batteries are notable for their high voltage, energy density, durability, and stable operation.

**Features:**

- High voltage
- High energy density
- Long shelf life
- Stable operation
- High rate discharge
- Strong leakage resistance
- Excellent durability

**Applications:**

- Cameras
- Electrical lock
- Electronic Counter
- Electronic measurement equipment
- Emergency signal light
- Gas safety emergency cutoff system
- Memory back-up
- Utility meters

## Technical Data - Table 1 - Cylindrical Type (BR)

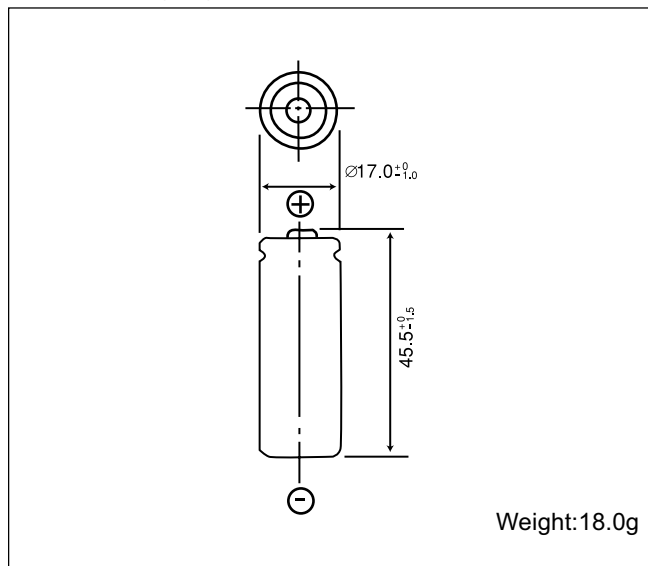| Model Number | Nominal Voltage (V) | *Nominal Capacity (mAh) | Dimensions (mm) | | Basic Battery Weight (g) | Continuous Drain (mA) | Operating Temp (°C) | |
|---|---|---|---|---|---|---|---|---|
| | | | External Diameter | Height | | | | |
| BR-C | 3 | 5,000 | 26.0 | 50.5 | 42.0 | 5.0 | -40 ~ +85 | |
| BR-A | 3 | 1,800 | 17.0 | 45.5 | 18.0 | 2.5 | -40 ~ +85 | |
| BR-1/2AA | 3 | 1,000 | 14.5 | 25.5 | 8.0 | 2.5 | -40 ~ +100 | |
| BR-2/3A | 3 | 1,200 | 17.0 | 33.5 | 13.5 | 2.5 | -40 ~ +85 | |
| *BR-AG | 3 | 2,200 | 17.0 | 45.5 | 18.0 | 2.5 | -40 ~ +85 | |
| *BR-2/3AG | 3 | 1,450 | 17.0 | 33.5 | 13.5 | 2.5 | -40 ~ +85 | |

*Nominal capacity is based on standard drain and cutoff voltage down to 2.0V at 20ºC (68ºF)

## Technical Data - Table 2 - Tab Configurations and Distributor Inventory

| Model No. | Drawing | |
|---|---|---|
| BR-1/2AAE2P | Tabs for PCB mounting. 2 Pins Positive 1 Pin Negative | |
| BR-1/2AAE5P | Tabs for PCB mounting. 1 Pin Positive 1 Pin Negative | |
| BR-2/3AT2SP | 12 mm tabs for adding lead wires | |
| BR-2/3AGT2SP | 12 mm tabs for adding lead wires | |
| BR-2/3AE5SP | Tabs for PCB mounting. 1 Pin Positive 1 Pin Negative | |
| BR-2/3AGE5SP | Tabs for PCB mounting. 1 Pin Positive 1 Pin Negative | |
| BR-2/3AE2SP | Tabs for PCB mounting. 2 Pins Positive 1 Pin Negative | |
| BR-2/3AGE2SP | Tabs for PCB mounting. 2 Pins Positive 1 Pin Negative | |
| BR-AT2P | 12 mm tabs for adding lead wires | |
| BR-AGT2P | 12 mm tabs for adding lead wires | |
| BR-AE2P | Tabs for PCB mounting. 1 Pin Positive 1 Pin Negative | |
| BR-AGE2P | Tabs for PCB mounting. 1 Pin Positive 1 Pin Negative | |
| BR-CT2P | 12 mm tabs for adding lead wires | |

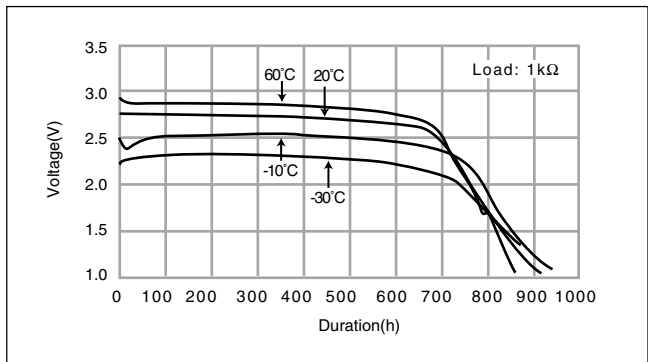# Poly-carbonmonofluoride Lithium Batteries: Individual Specifications
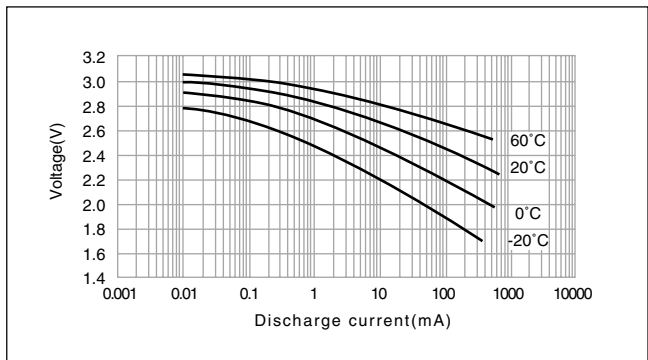
## BR-AG

### ■ Dimensions(mm)

∅17.0±⁰₁.₀

45.5±⁰₁.₅

⊕

⊖

Weight:18.0g

### ■ Specification

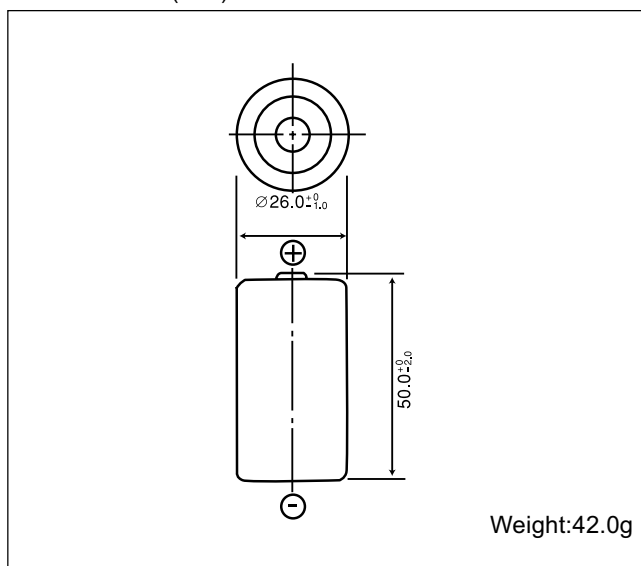| Nominal voltage (V) | 3 |
|---|---|
| Nominal capacity (mAh) | 2,200 |
| Continuous standard load (mA) | 2.5 |
| Operating temperature (C) | -40 ~ +85 |

### ■ Temperature Characteristics



### ■ Operating voltage vs. Discharge current(voltage at 50% discharge depth)
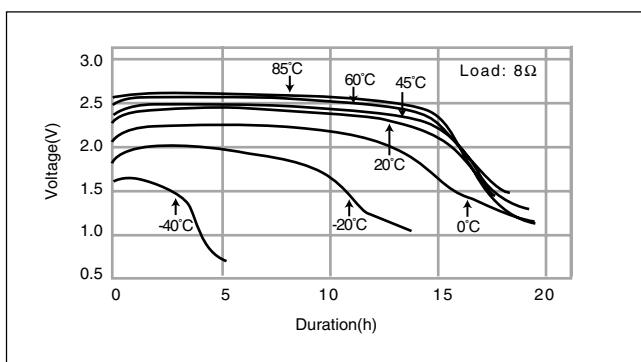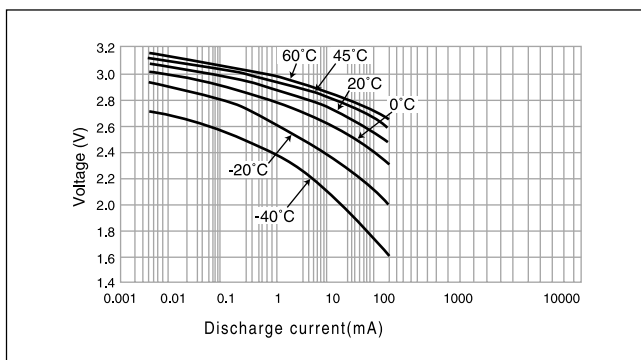


## BR-C

### ■ Dimensions(mm)

∅26.0±⁰₁.₀

50.0±⁰₂.₀

⊕

⊖

Weight:42.0g

### ■Specification

| Nominal voltage (V) | 3 |
|---|---|
| Nominal capacity (mAh) | 5,000 |
| Continuous standard load (mA) | 5.0 |
| Operating temperature (C) | -40 ~ +85 |

### ■ Temperature Characteristics



### ■ Operating voltage vs. Discharge current(voltage at 50% discharge depth)

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# Poly-carbonmonofluoride Lithium Batteries (BR series)

## TAB CONFIGURATIONS

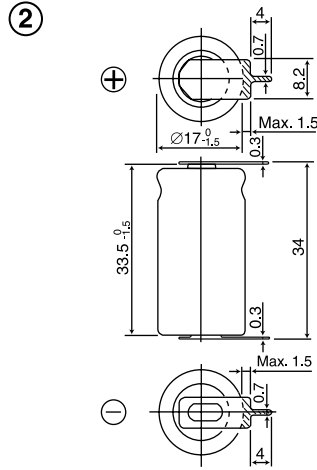| Bare Cell Model No. | Tab Type | Description | Configuration Diagram No. | Nominal | |
|---|---|---|---|---|---|
| | | | | Voltage (V) | Capacity (mAh) |
| BR-2/3A | BR-2/3AT2SP | 12 mm tabs for adding lead wires | 1 | 3 | 1200 |
| BR-2/3AG | BR-2/3AGT2SP* | | | | 1450 |
| BR-2/3A | BR-2/3AE5SP | Tabs for PCB mounting.  1 Pin Positive 1 Pin Negative | 2 | 3 | 1200 |
| BR-2/3AG | BR-2/3AGE5SP* | | | | 1450 |
| BR-2/3A | BR-2/3AE2SP | Tabs for PCB mounting.  2 Pins Positive 1 Pin Negative | 3 | 3 | 1200 |
| BR-2/3AG | BR-2/3AGE2SP* | | | | 1450 |
| BR-1/2AA | BR-1/2AAE5P | Tabs for PCB mounting.  1 Pin Positive 1 Pin Negative | 4 | 3 | 1000 |
| BR-1/2AA | BR-1/2AAE2P | Tabs for PCB mounting.  2 Pins Positive 1 Pin Negative | 5 | 3 | 1000 |
| BR-A | BR-AT2P | 12 mm tabs for adding lead wires | 6 | 3 | 1800 |
| BR-AG | BR-AGT2P* | | | | 2200 |
| BR-A | BR-AE2P | Tabs for PCB mounting.  1 Pin Positive 1 Pin Negative | 7 | 3 | 1800 |
| BR-AG | BR-AGE2P* | | | | 2200 |
| BR-C | BR-CT2P | 12 mm tabs for adding lead wires | 8 | 3 | 5000 |

# BR Series Cylindrical Cell Tab Configurations
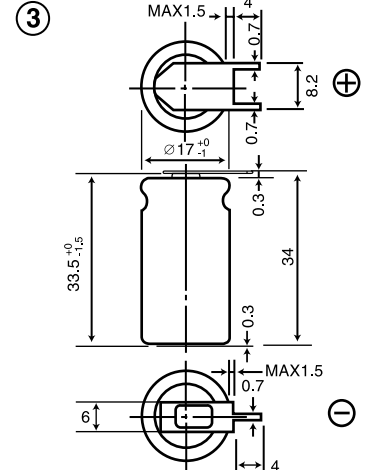
## DIMENSIONS / MM
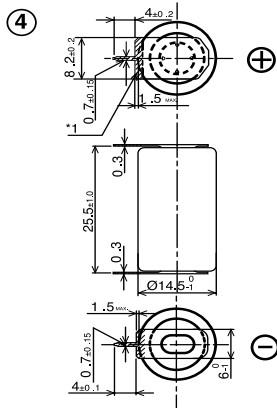
**Dimensions/mm**
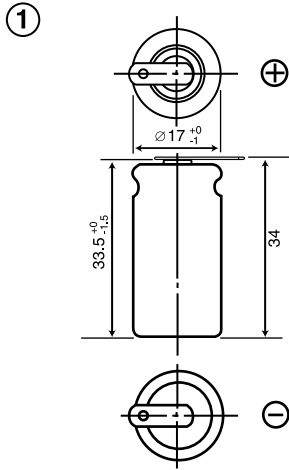


① BR-2/3AT2SP
BR-2/3AGT2SP*

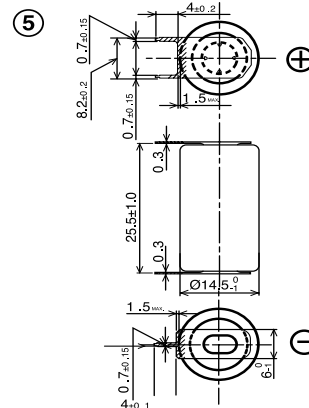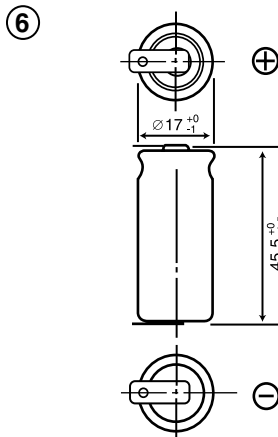② BR-2/3AE5SP
BR-2/3AGE5SP*
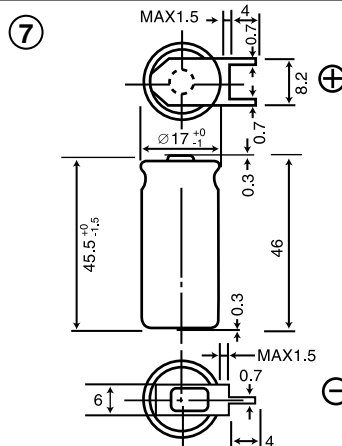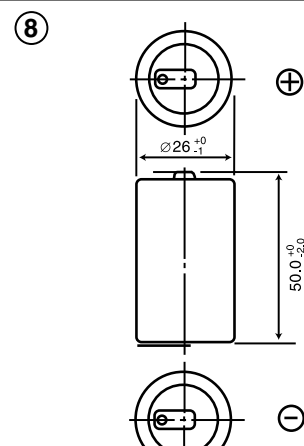
③ BR-2/3AE2SP
BR-2/3AGE2SP*

④ BR-1/2AAE5P

⑤ BR-1/2AAE2P

⑥ BR-AT2P
BR-2/3AGT2P*

⑦ BR-AE2P
BR-AGE2P*

⑧ BR-CT2P

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**LITHIUM HANDBOOK**

**MARCH 2007**

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