

**POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES) – COIN TYPE LITHIUM BATTERIES**

Panasonic Lithium batteries coin type BR feature a high energy density, and were developed and commercialised using Panasonic's extensive experience in battery technology. They exhibit stable performance under relatively high environmental temperatures.



**GENERAL SPECIFICATIONS**

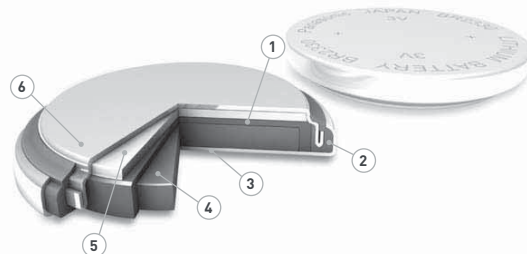
Model number	Electrical Characteristics at 20 °C			Dimensions (mm)		Approx. Weight (g)	JIS	IEC
	Nominal Voltage (V)	Nominal Capacity (mAh)* <sup>1</sup>	Continuous Standard Drain (mA)	Diameter	Height			
BR-1220	3	35	0.03	12.5	2.0	0.7	-	-
BR-1225	3	48	0.03	12.5	2.5	0.8	-	BR-1225
BR-1632	3	120	0.03	16.0	3.2	1.5	-	-
BR-2032	3	200	0.03	20.0	3.2	2.5	-	-
BR-2325	3	165	0.03	23.0	2.5	3.0	-	BR-2325
BR-2330	3	255	0.03	23.0	3.0	3.2	-	-
BR-3032	3	500	0.03	30.0	3.2	5.5	-	-

**Applications**

- ETC (Electronic Toll Collection) systems
- Varied range of meters
- Memory back-up power supplies
- Electronic notebooks, etc.

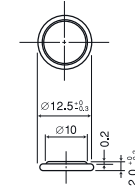
**3D ILLUSTRATION**

- 1 Separator
- 2 Gasket
- 3 Positive pole (cell can)
- 4 Cathode (poly-carbonmonofluoride)
- 5 Anode (lithium)
- 6 Negative pole



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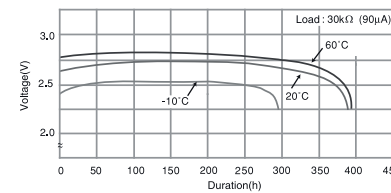
**BR-1220**



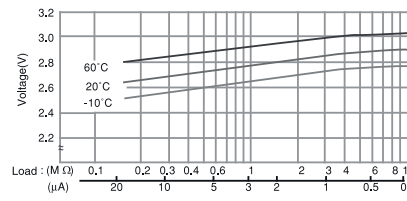
**SPECIFICATIONS**

Name	BR-1220
Nominal voltage (V)	3
Nominal capacity (mAh)	35
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	0.7

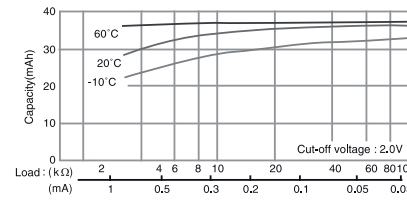
**DISCHARGE TEMPERATURE CHARACTERISTICS**



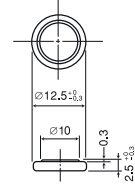
**OPERATING VOLTAGE VS. DISCHARGE CURRENT\***



**CAPACITY VS. LOAD RESISTANCE**



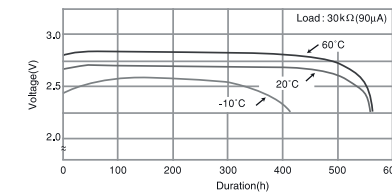
**BR-1225**



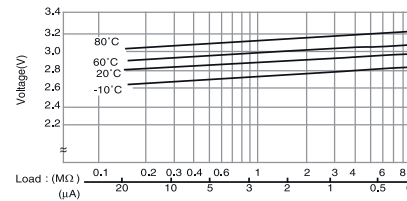
**SPECIFICATIONS**

Name	BR-1225
Nominal voltage (V)	3
Nominal capacity (mAh)	48
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	0.8

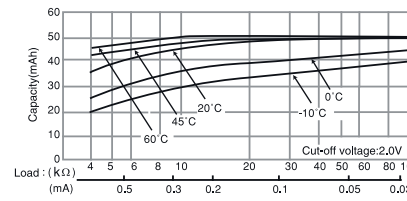
**DISCHARGE TEMPERATURE CHARACTERISTICS**



**OPERATING VOLTAGE VS. DISCHARGE CURRENT\***



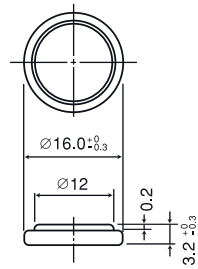
**CAPACITY VS. LOAD RESISTANCE**



The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.  
 \* Voltage at 50% discharge depth.

## POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)

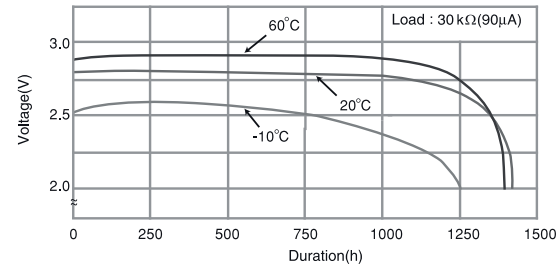
### BR-1632



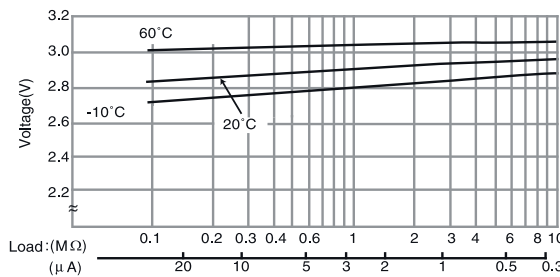
#### SPECIFICATIONS

Name	BR-1632
Nominal voltage (V)	3
Nominal capacity (mAh)	120
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	1.5

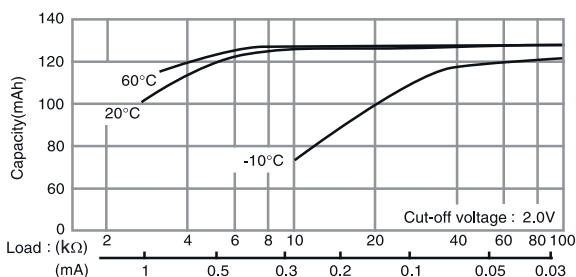
#### DISCHARGE TEMPERATURE CHARACTERISTICS



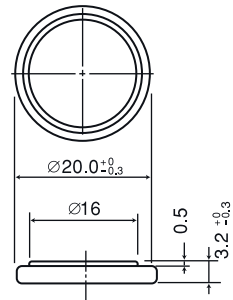
#### OPERATING VOLTAGE VS. DISCHARGE CURRENT\*



#### CAPACITY VS. LOAD RESISTANCE



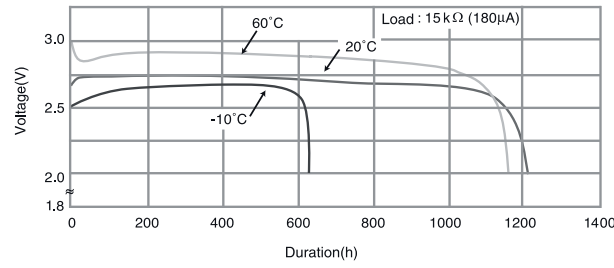
### BR-2032



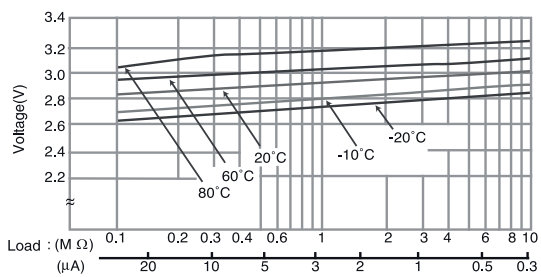
#### SPECIFICATIONS

Name	BR-2032
Nominal voltage (V)	3
Nominal capacity (mAh)	200
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	2.5

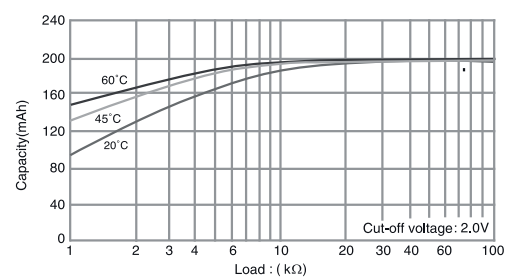
#### DISCHARGE TEMPERATURE CHARACTERISTICS



#### OPERATING VOLTAGE VS. DISCHARGE CURRENT\*



#### CAPACITY VS. LOAD RESISTANCE



## POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)

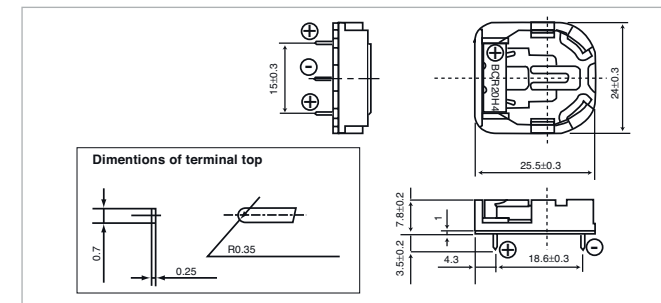
### Lithium battery holders for BR-2032

These battery holders are designed for sure and easy loading/removal of Panasonic Coin Type Lithium batteries in/from equipment enabling the batteries to fully exploit their capabilities as the back-up power supply in C-MOS RAM memory and microcomputer memory. All of the battery holders are designed to prevent inverted insertion of the battery.

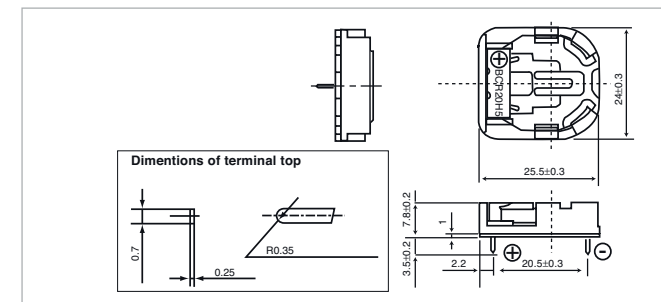


#### BCR20H4

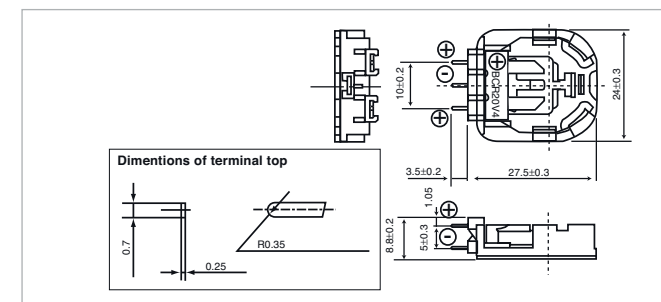
##### BCR20H4 (3 terminals)



##### BCR20H5 (2 terminals)



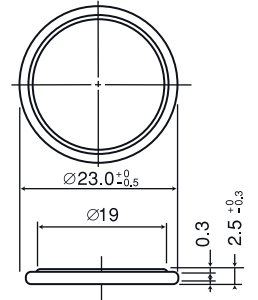
##### BCR20V4 (3 terminals)



#### Precaution for washing battery holders

The battery holders can be adversely affected by some detergents use in the circuit board washing process and may result in cracks forming in the holder. Please test the holders in your washing process before use.

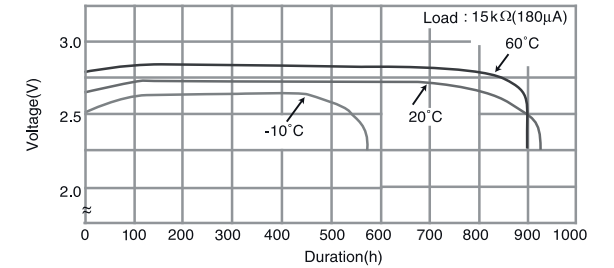
### BR-2325



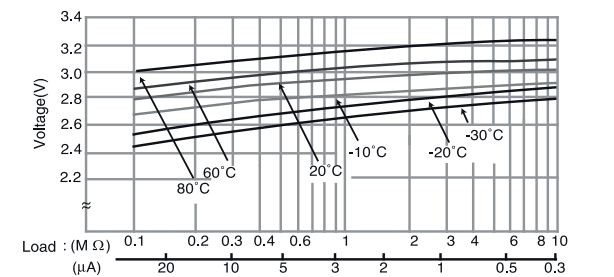
#### SPECIFICATIONS

Name	BR-2325
Nominal voltage (V)	3
Nominal capacity (mAh)	165
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	2.5

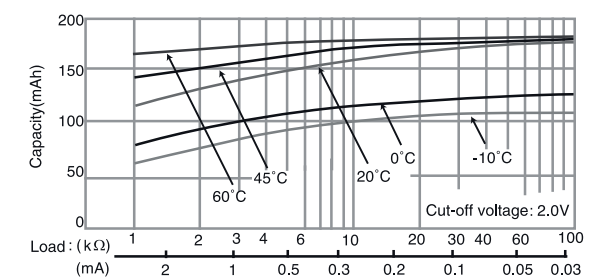
#### DISCHARGE TEMPERATURE CHARACTERISTICS



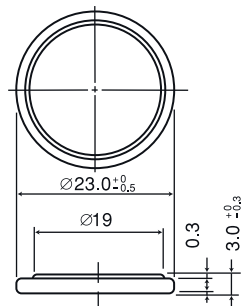
#### OPERATING VOLTAGE VS. DISCHARGE CURRENT\*



#### CAPACITY VS. LOAD RESISTANCE



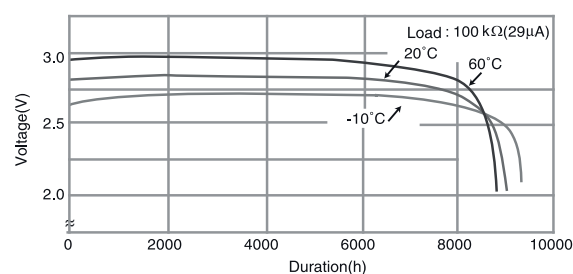
## BR-2330



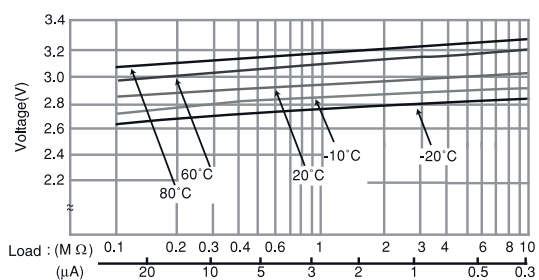
## SPECIFICATIONS

Name	BR-2330
Nominal voltage (V)	3
Nominal capacity (mAh)	255
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	3.0

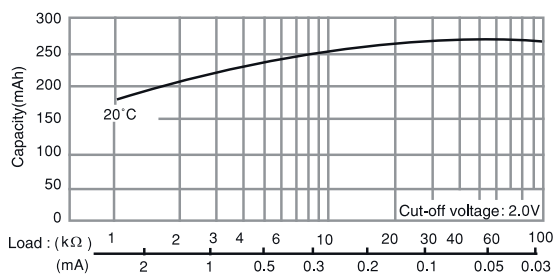
## DISCHARGE TEMPERATURE CHARACTERISTICS



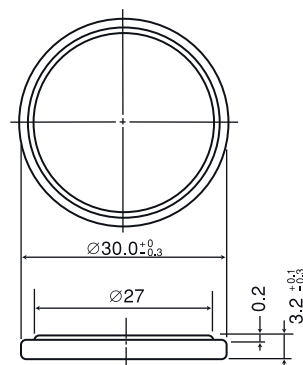
## OPERATING VOLTAGE VS. DISCHARGE CURRENT\*



## CAPACITY VS. LOAD RESISTANCE



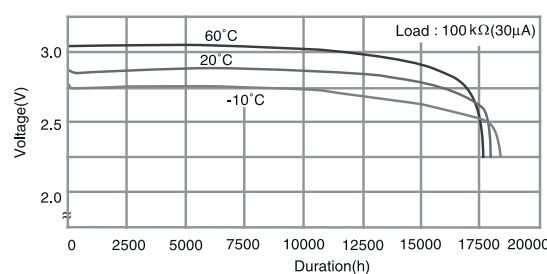
## BR-3032



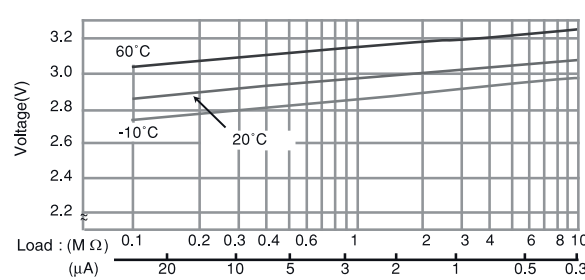
## SPECIFICATIONS

Name	BR-3032
Nominal voltage (V)	3
Nominal capacity (mAh)	500
Continuous drain (mA)	0.03
Operating temperature (°C)	-30 to +80
Weight (g)	5.5

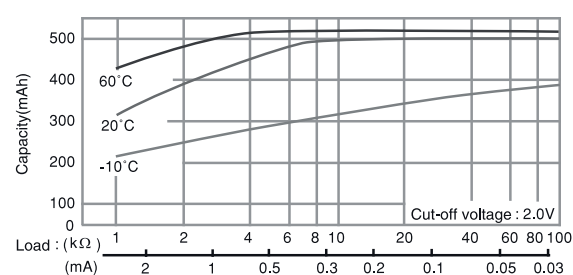
## DISCHARGE TEMPERATURE CHARACTERISTICS



## OPERATING VOLTAGE VS. DISCHARGE CURRENT\*



## CAPACITY VS. LOAD RESISTANCE



## HIGH OPERATING TEMPERATURE POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR-A SERIES) – COIN TYPE LITHIUM BATTERIES

The materials for the gasket and separator featured in these Coin Type Lithium batteries have been replaced with a special engineering plastic and the operating temperature has been significantly increased by employing an electrolyte with a high boiling point. These benefits make this battery series the ideal power supply in high ambient temperature applications.



## GENERAL SPECIFICATIONS

Model number	Electrical Characteristics at 20°C			Dimensions (mm)		Approx. Weight (g)	JIS	IEC
	Nominal Voltage (V)	Nominal Capacity (mAh)*1	Continuous Standard Drain (mA)	Diameter	Height			
BR-1225A*2	3	48	0.03	12.5	2.5	0.8	-	-
BR-1632A*2	3	120	0.03	16.0	3.2	1.5	-	-
BR-2330A*2	3	255	0.03	23.0	3.0	3.2	-	-
BR-2450A*2	3	550	0.03	24.5	5.0	5.9	-	-
BR-2477A*2	3	1,000	0.03	24.5	7.7	8.0	-	-

## Applications

- Tire Pressure Monitoring Systems (TPMS)
- Water Meters
- Heat cost allocators
- Memory back-up power supplies in high
- High ambient temperature applications, etc.

## 3D ILLUSTRATION

- 1 Negative pole
- 2 Separator
- 3 Cathode (poly-carbonmonofluoride)
- 4 Positive pole (cell can)
- 5 Gasket
- 6 Anode (lithium)

