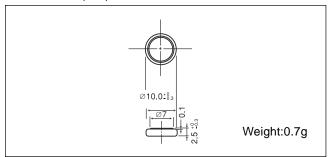
## Manganese Dioxide Lithium Coin Batteries: Individual Specifications

### CR1025

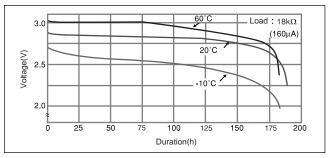
#### ■ Dimensions(mm)



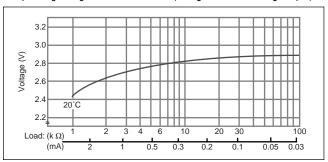
#### ■ Specification

Nominal voltage (V)	3	
Nominal capacity (mAh)	30	
Continuous standard load (mA)	0.1	
Operating temperature (C)	-30 ~ +60	

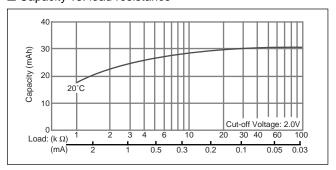
#### ■ Temperature Characteristics



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

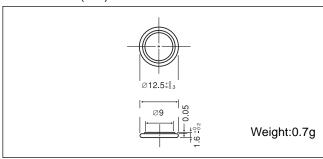


#### ■ Capacity vs. load resistance



### **CR1216**

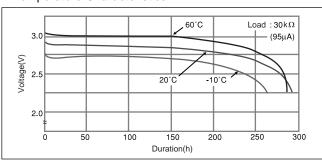
#### ■ Dimensions(mm)



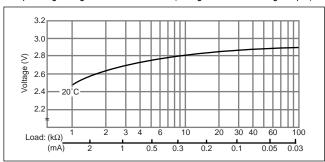
#### ■ Specification

Nominal voltage (V)	3	
Nominal capacity (mAh)	25	
Continuous standard load (mA)	0.1	
Operating temperature (C)	-30 ~ +60	

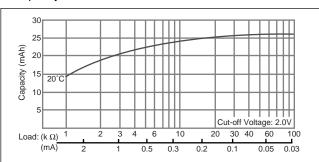
#### ■ Temperature Characteristics



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



#### ■ Capacity vs. load resistance



# **Coin Type Lithium Batteries**

## Manganese Dioxide Lithium Batteries (CR Series)



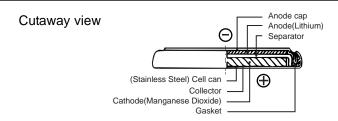




### **Features**

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



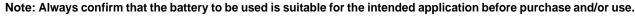
## **Applications**

Calculators

Electronic watches (digital and analog)

Cameras

- Memory backup
- Compact, low power consuming cordless appliances
- IC card





### **General Specifications**

Model No.	Electrical Characteristics (20°C)		Dimensions (mm)		Weight (g)	JIS	IEC	
Model No.	Nominal Voltage (V)	*Nominal Capacity (mAh)	Continuous Drain (mA)	Diameter	Height	weight (g)	313	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

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



# Poly-carbonmonofluoride (BR Series) and Manganese Dioxide (CR Series)

## **COIN CELL TAB CONFIGURATIONS**

Model	Tab	Configuration			
Number	With Insulation Wrap Without Insulation Wrap		Diagram No.		
BR TYPE					
BR1220	/1HF	/1HE	1		
BR1220	/1VC	/1VB	2		
BR1225	/1HC	/1HB	3		
BR1225	/1VC		4		
BR1632	/1HF		5		
BR2032	/1HM		6		
BR2032		/1HG	7		
BR2032	/1HS	/1HSE	8		
BR2032	/1GUF	/1GU	9		
BR2032	/1HF	/1HE	10		
BR2032		/1VB	11		
BR2032	/1GVF	/1GV	12		
BR2032	/1F4		13		
BR2032	/1F2		14		
BR2325	/1HC	/1HB	15		
BR2325	/1VC		16		
BR2325		/1HG	17		
BR2325	/2HC		18		
BR2325		/1VG	19		
BR2330	/1HF	/1HE	20		
BR2330	/1GUF	/1GU	21		
BR2330	/1VC	/1VB	22		
BR2330	/1GVF	/1GV	23		
BR2330	/1F3		24		
BR2330	/1F4C		25		
BR3032	/1VC		26		
BR3032	/1F2		27		

**Note:** Refer to page 60 for BR "A" (High Temp) Tab configurations. Please contact Panasonic for requests on custom Tab configurations. Minimum order requirements may apply.

Model	Tab Type		Configuration		
Number	With Insulation Wrap Without Insulation Wrap		Diagram No.		
CR TYPE					
CR1220	/1HF	/1HE	1		
CR1220	/1VC	/1VB	2		
CR1616		/1F2	28		
CR1632	/1HF		29		
CR2016	/1F2		6		
CR2025	/1F2		30		
CR2032		/1HU3	31		
CR2032	/1VS1		32		
CR2032		/1HG	8		
CR2032	/1HS	/1HSE	9		
CR2032	/1GUF	/1GU	10		
CR2032	/1HF	/1HE	11		
CR2032		/1VB	12		
CR2032	/1GVF	/1GV	13		
CR2032	/1F4		14		
CR2032	/1F2		15		
CR2330	/1HF	/1HE	20		
CR2330	/1GUF	/1GU	21		
CR2330	/1VC	/1VB	22		
CR2330	/1GVF	/1GV	23		
CR2330	/1F3		24		
CR2330	/1F4C		25		
CR2354	/1HF	/1HE	33		
CR2354	/1GUF	/1GU	34		
CR2354	/1VC	/1VB	35		
CR2477	/1VC	/1VB	36		
CR2477	/1HF	/1HE	37		
CR2450	/H1A		38		
CR2450	/G1A		39		
CR3032	/1VC		26		
CR3032	/1F2		27		