

PRODUCT SPECIFICATION	
Individual Product Specification	
Specifications for Cylindrical Zinc Carbon Battery R20 (DRNF-W)	

PRODUCT SPECIFICATION	Panasonic
Individual Product Specification	DRNF-W

1. Battery identification

name

R 20 / UM 1

type

zinc carbon / metal jacket

nominal voltage

1.5 V

average weight

100 gr.

manufactured by

PMB P
2. Battery dimensions

As per attached drawing
3. Typical battery performance

Discharge modes

Test	Resistance	Daily period	End point	Result *	Result**
Radio	10 Ω	4 h	0.9 V	43.0 h	37.8 h
Recorder	3.9 Ω	1 h	0.9 V	14.7 h	13.1 h
Motor	2.2 Ω	1 h	0.8 V	6.7 h	5.4 h
LIF	2.2 Ω	4 min./h , 8 h/ day	0.9 V	425 min	360 min

Open circuit voltage (OCV)
Minimum average duration

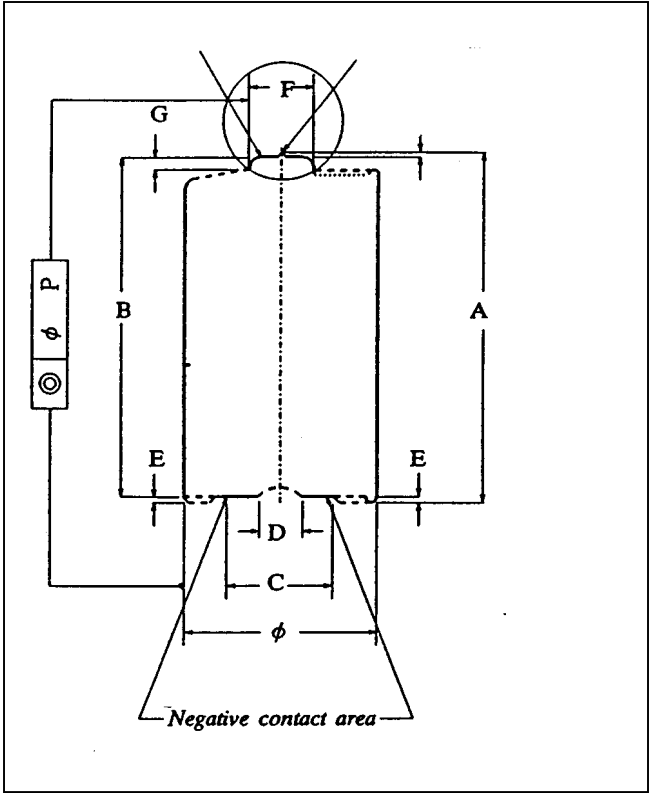
	Initial*	After 12 months storage **
OCV (at 20±2°C)	1.6 V	1.52 V
Min. aver. duration (at 20±2°C)***	35.7 h	27.2 h

- * The initial discharge test shall commence with 30 days since manufacture. During this period, the batteries are kept under the condition of 20±2°C.
- ** During this period, the batteries shall also be kept under the condition of 20±2°C.
- *** 10 Ω, 4 h / day, 0.9 V

4. Mercury and Cadmium contents
- No Mercury (Hg) and Cadmium (Cd) are used in battery.

PRODUCT SPECIFICATION	
Individual Product Specification	

Size:
IEC: R20



Dim	Max	Min
Ø	34.2	32.3
A	61.5	59.5
B		59.5
C		18.0
D	7.5	
E	1.0	
F	9.5	7.8
G		1.5
Pip	0.4	

Voltage	1.5 V
Terminal	(+) Cap (-) Base
Average weight	100 g
Jacket	Metal