

Technical Data for Alkaline Dry Battery

Type: LR20

(Made in China)

2013/07/01

TOSHIBA HOME APPLIANCES CORPORATION

Battery Business Div.

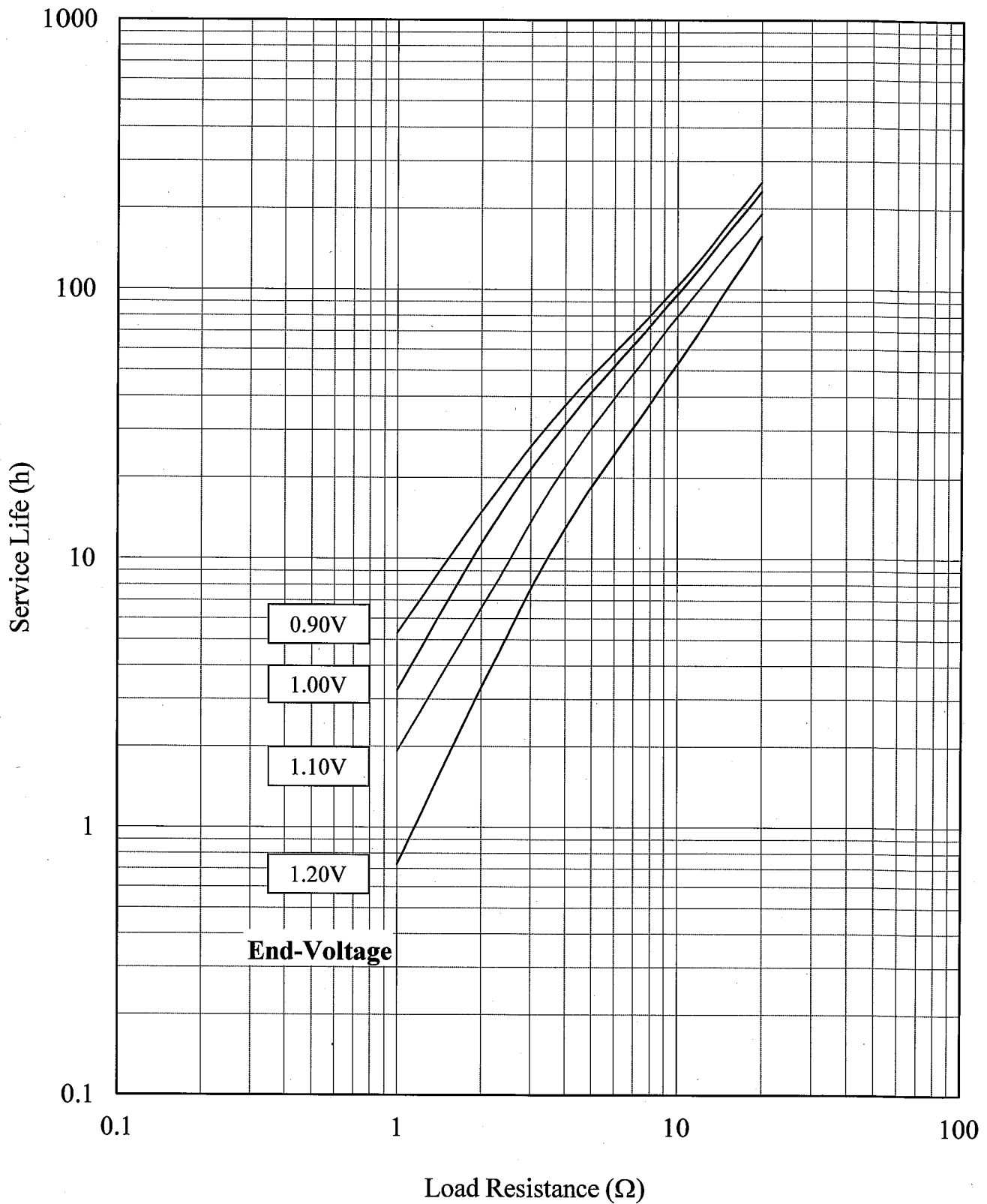
Ratings

Battery System		Alkaline Dry Battery	
Item			
Battery Type		LR20	
Nominal Voltage		1.5V	
Standard Discharge Performance ※Initial		Discharge Condition (JIS/IEC)	Service Life
		(1) 2.2Ω (4min/1h)-8h/day (End-Voltage:0.9V) :	21.0 hours.
		(2) 2.2Ω 1h/day (End-Voltage:0.8V) :	22.0 hours.
		(3) 10Ω 4h/day (End-Voltage:0.9V) :	120 hours.
		(4) 600mA 2h/day (End-Voltage:0.9V) :	15.5 hours.
Standard Weight		140 g	
Terminals	Cap Terminals	Fe + Ni plate	
	Base Terminals	Fe + Ni plate	
Outer Dimensions	Overall Height	61.5(0/-2.0)mm	
	Diameter	φ34.2(0/-1.9)mm	
Usable Temperature Range		-10 ~ 45deg.C (If the operating temperature exceeds 40°C, the operating time shall be within 30 days.)	

(NOTE) *: " Initial" means performance within three months after production.

LR20 Load Resistance vs Service Life

Test Condition : Continuous Discharge, Initial, 20 deg.C

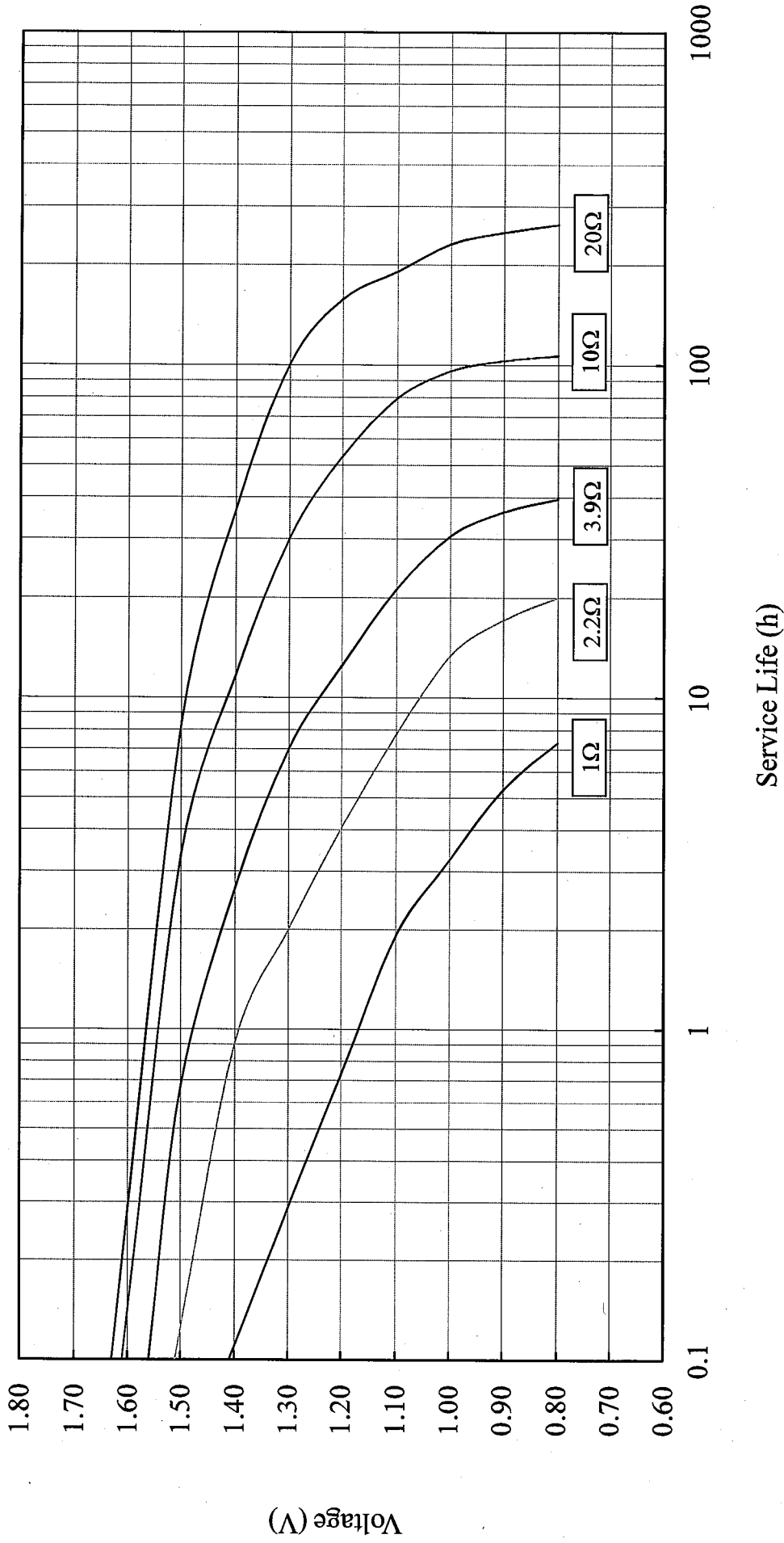


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LR20 Discharge Characteristics

Test Condition : Continuous Discharge, Initial, 20deg.C

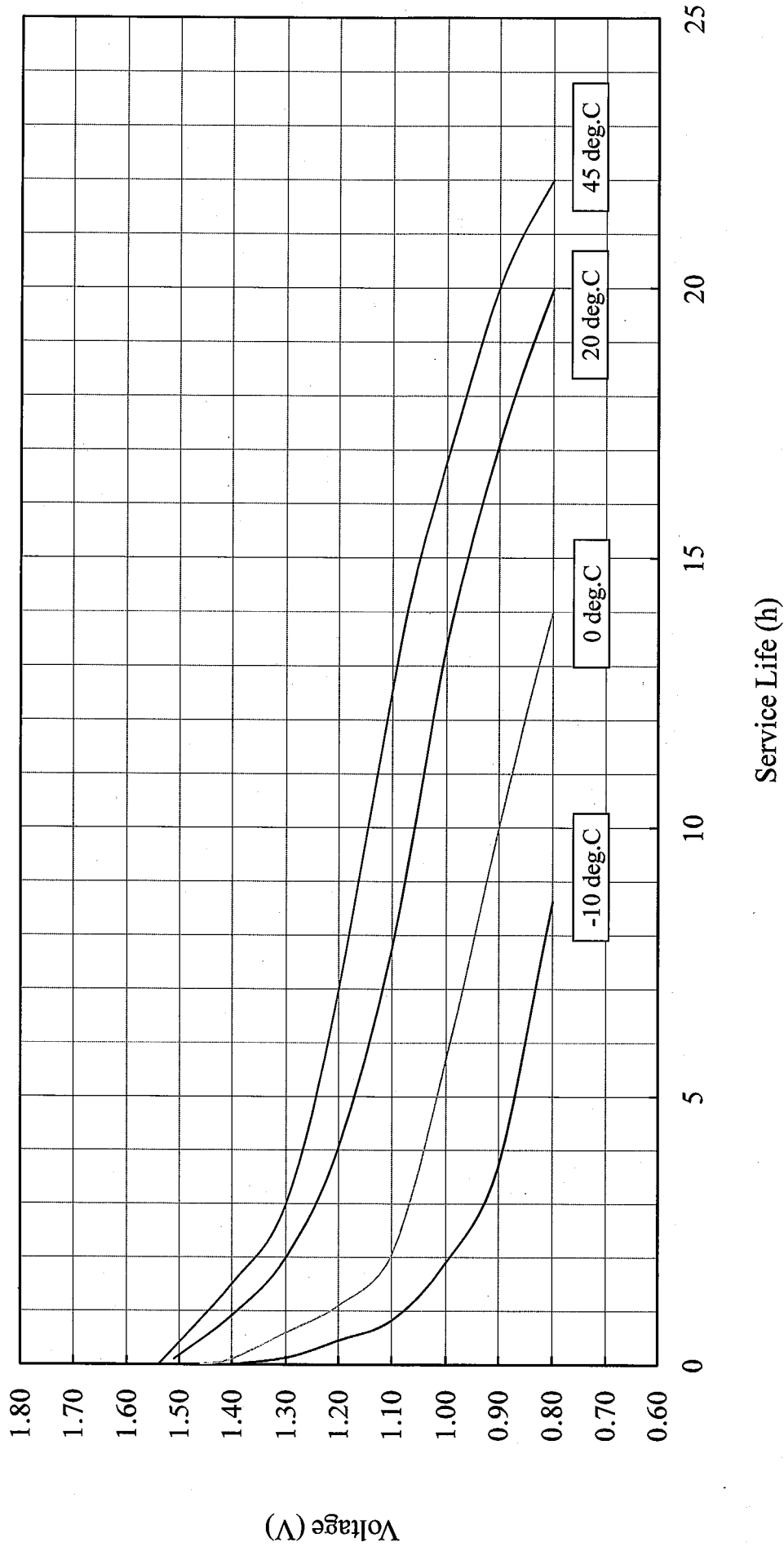


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LR20 Discharge Characteristics

Test Condition: 2.2Ω Continuous Discharge, Initial

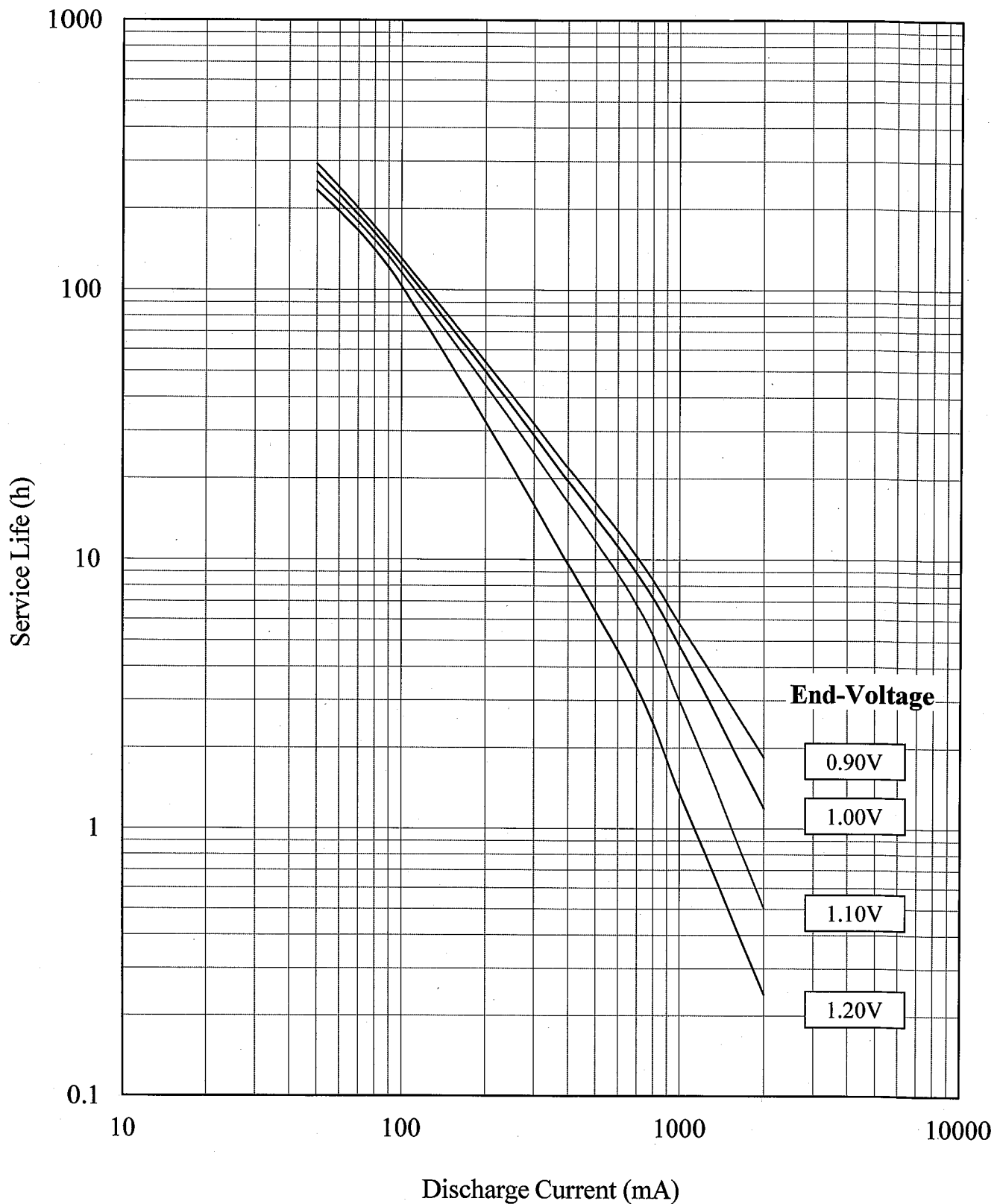


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LR20 Discharge Current vs Service Life

Test Condition : Continuous Discharge, Initial, 20 deg.C

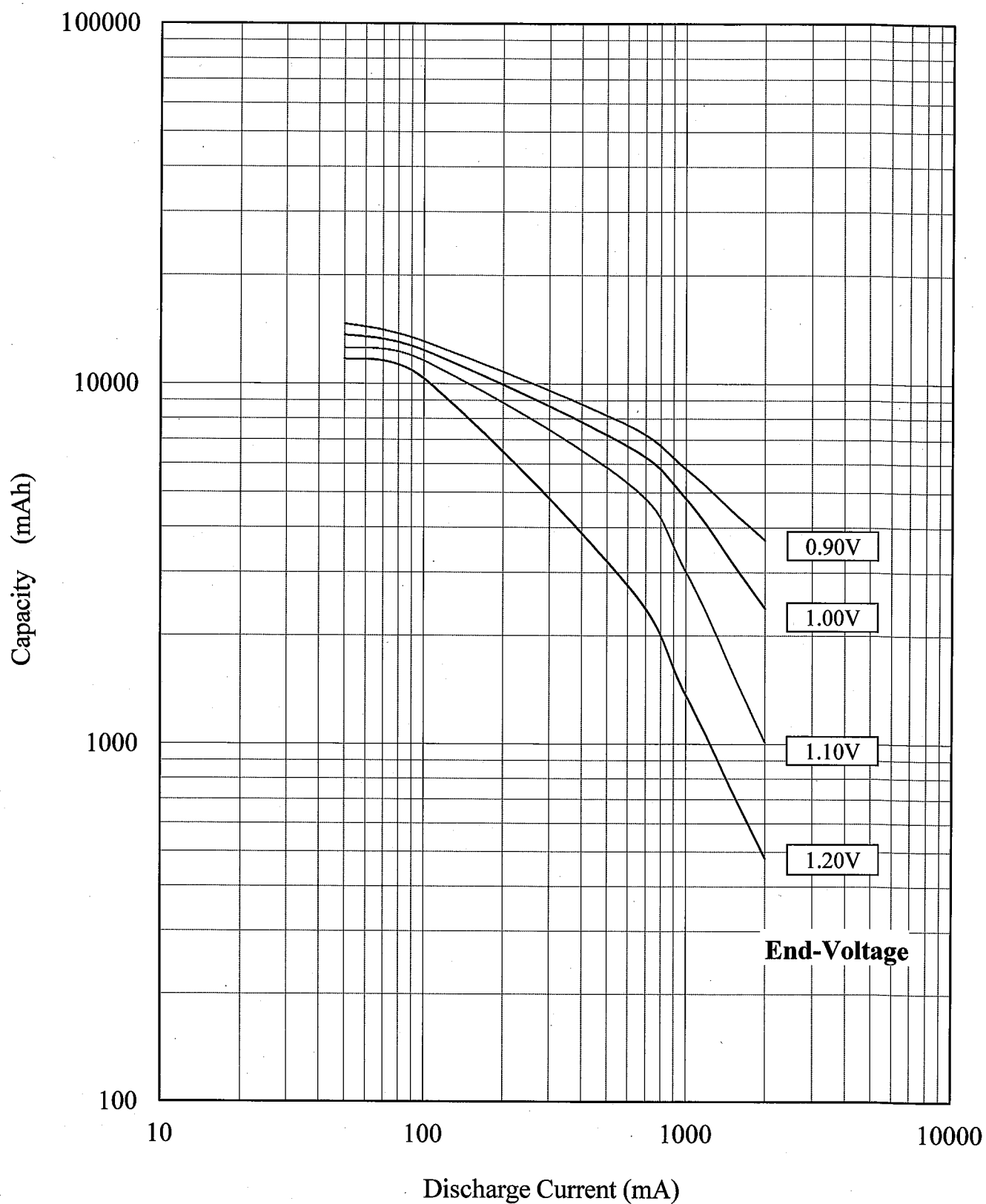


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LR20 Discharge Current vs Capacity

Test Condition : Continuous Discharge, Initial, 20 deg.C

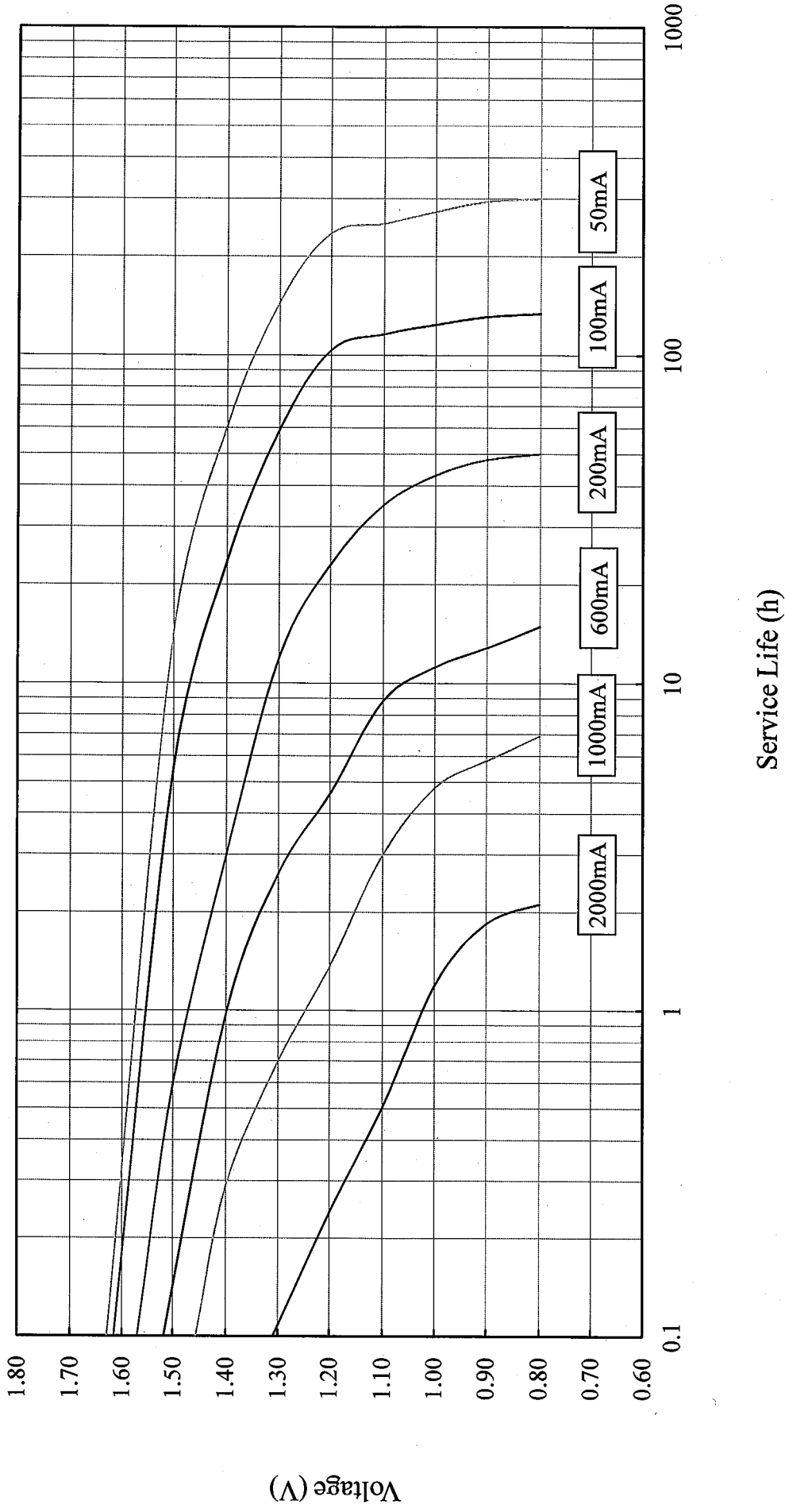


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LR20 Discharge Characteristics

Test Condition: Continuous Discharge, Initial, 20deg.C

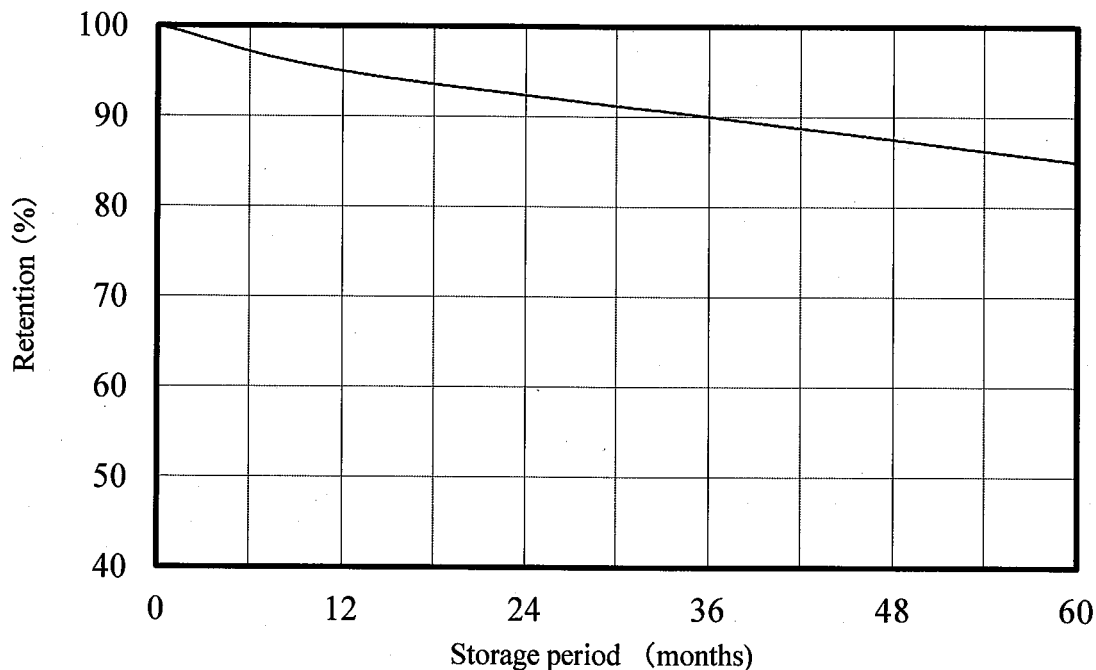


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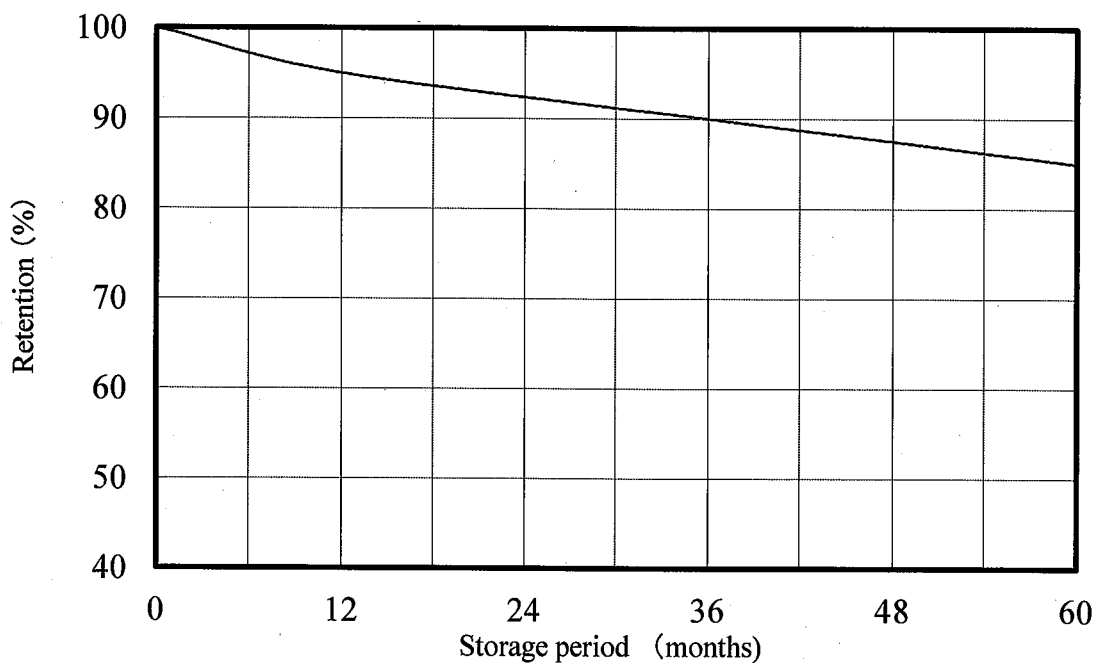
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LR20 Storage Characteristics

[① Discharge Condition: $2.2\ \Omega$ 1h/day End-Voltage 0.8V]



[② Discharge Condition: $10\ \Omega$ 4h/day End-Voltage 0.9V]

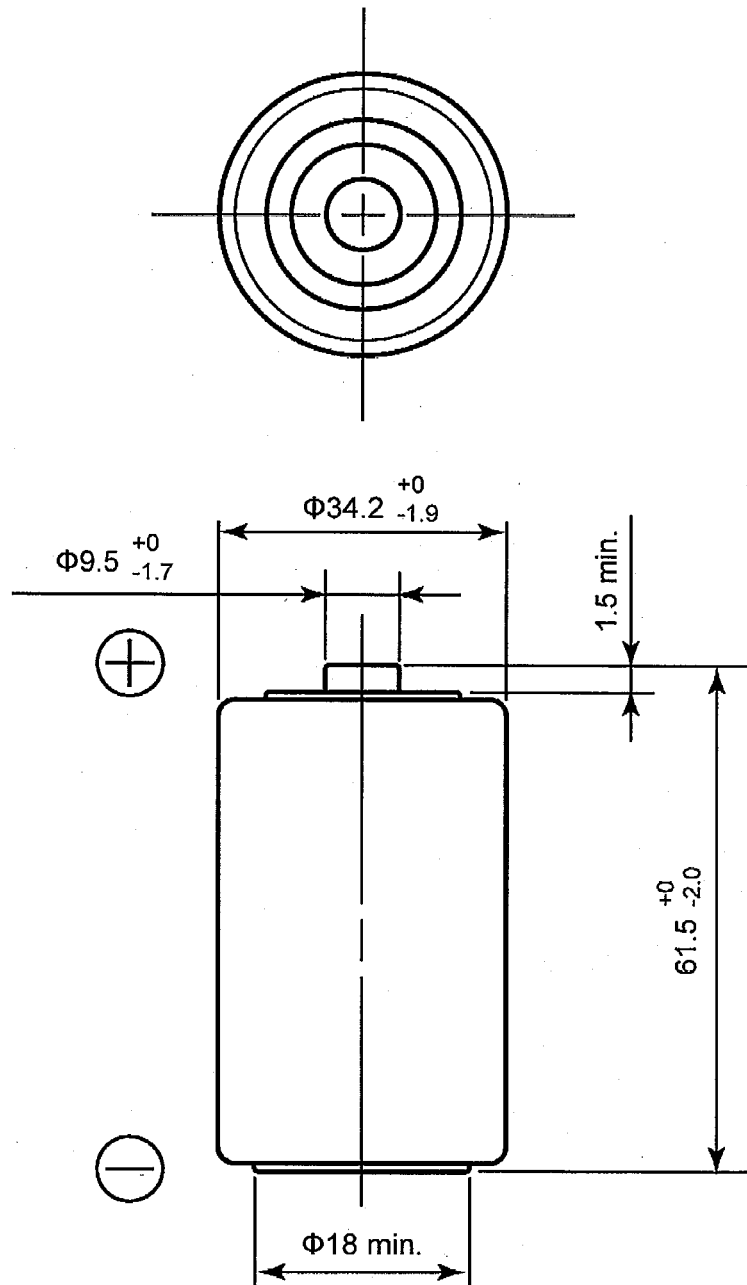


- [Note]
1. Discharge temperature, relative humidity: $20 \pm 2^\circ\text{C}$, $(60 \pm 15)\%\text{RH}$
 2. Storage temperature, relative humidity: $20 \pm 2^\circ\text{C}$, $(60 \pm 15)\%\text{RH}$
 3. Retention: Self-discharge rate

LR20 Leakage Performance

Test Items		Electrolyte Leakage (%)						
Test Condition	Storage Period	20days	40days	60days	90days	1year	2year	5years
	Room Temperature	0	0	0	0	0	0	0
Storage at High Temperature and High Humidity	45deg.C-70%RH	0	0	0	0	-	-	-
	60deg.C	0	0	0	-	-	-	-

LR20 Battery Dimensions



Unit: mm

Terminals: Positive-cap terminal

Negative-base terminal

Outer Shell: Shrink-Label