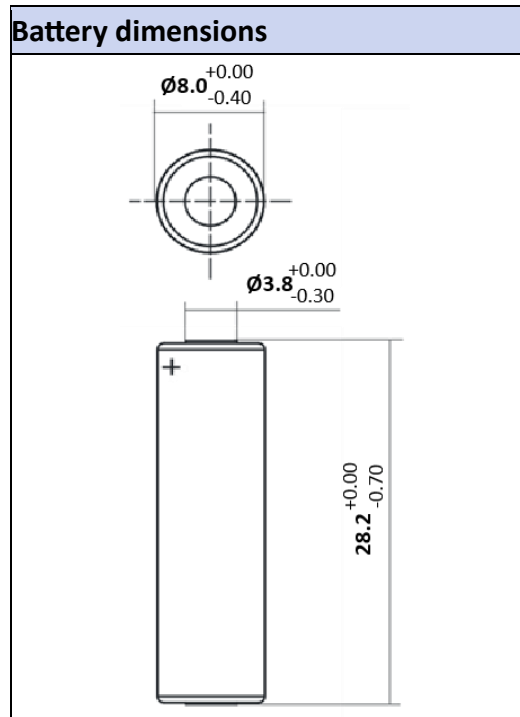


Alkaline Zinc-Manganese Dioxide Mercury-Free Battery

Primary characteristics		
Parameter	Value	Unit
Nominal voltage	12	V
Rated capacity	28	mAh

Scope

The purpose of this product specification is to provide technical information for the Alkaline Zinc-Manganese Dioxide Mercury-Free Battery. The test shall be conducted in strict accordance with the method specified in this specification. If you have any objection to the test items or test methods, please contact Akyga Battery.



Specification table

Parameter	Value	Unit
Battery model	A27	-
Nominal voltage	12	V
Nominal capacity ¹⁾	28	mAh
Operating temperature	-10/+60	°C
Average weight	4.9	g
Notes:		
¹⁾ Conditions: Rated at 20KΩ at (20±2)°C, continuous discharging to the End-point Voltage of 6.0V		
Identification		
The contents printed on the label:		
Model: A27		
Registered Trademark: Akyga Battery		
Nominal Voltage: 12V		
Battery Poloidal: “+” and “-”		
Warning words: Install and use correctly. Do not recharge, disassemble, heat and shot-circuit		
Chemical system		
(-) Zn KOH MnO ₂ (+)		

Electrical characteristics (Test conditions: 20°C±2°C)

Items	Off-load voltage	On-load voltage	Acceptance criteria
Initial (within 30 days after delivery)	≥12.4V	≥11.4	MIL-STD105E, Class II, Double Sampling, AQL=0.4
After 12 months	≥12.2V	≥10.8	

Discharge performance (Test conditions: 20°C±2°C)

Discharge conditions			Minimum average duration	
Resistance	Daily period	End Point Voltage	Initial	After 12 months
20kΩ	24h	6.0V	55h	49.5h
1kΩ	24h	6.0V	80min	60min
1kΩ	1s/4s, 24h	6.0V	9000 pulses	8100 pulses

Acceptance criteria:

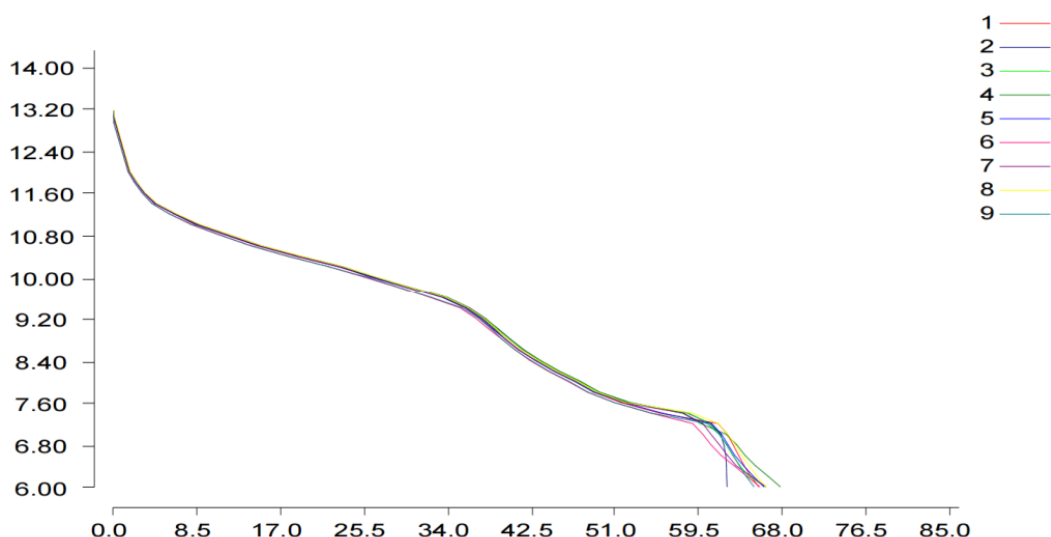
1. Test nine batteries.
2. If the average discharge time is equal to or greater than the specified figure and no more than one battery has a service out of less than 80% of the specified figure, the batteries are considered to conform to standards.
3. One re-test is allowed to confirm the previous result.

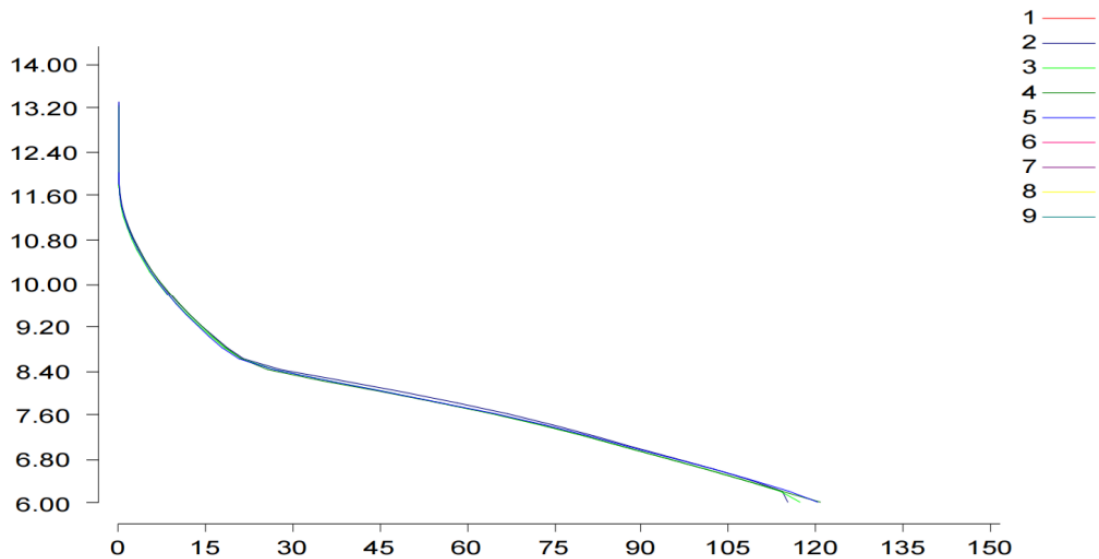
Safety characteristics

Test item	Conditions	Period	Requirements	Acceptance standard
Over-discharge characteristics	Temp.: 20±2°C; Load: 20KΩ	Continuous discharge 48 hours after discharge termination	No leakage or explosion by eye	N=9, Ac=0, Re=1

Discharge characteristics (Test conditions: 20±2°C)

20kΩ, 24h/day, E.P.V.: 6.0V



1k Ω , 24h/day, E.P.V.: 6.0


Important notes

The metal shell adopts horse skin, environmental protection color printing production process or labeling production process. The spring sheet is made of stainless steel with a wavy shape at four corners to ensure battery contact and combined battery safety.

Environmental friendly black PET material to ensure that the battery is moisture-proof and other external radiation.

Both the positive and negative electrode caps are made of iron material.

Akyga Battery reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Akyga Battery or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on Akyga Battery data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Akyga Battery does not assume any liability arising out of the application or use of any product or circuit. Akyga Battery products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Akyga Battery. Customers using or selling Akyga Battery components for use in such applications do so at their own risk and shall agree to fully indemnify Akyga Battery and its subsidiaries harmless against all claims, damages and expenditures.