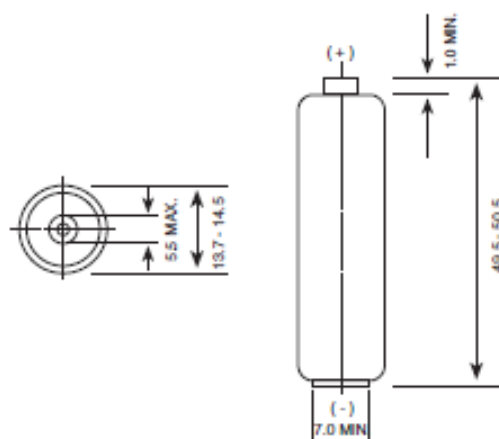


NO MERCURY AND CADMIUM ADDED

Description	: Mercury & Cadmium Free Alkaline Manganese Battery, AA Size
Chemical System	: Alkaline Manganese
Nominal Voltage	: 1.5 Volts
Nominal Dimensions	: $\phi 14.5$ mm x 50.5 mm
Terminals	: Protruded positive (+) and flat negative (-) contacts
Jacket	: Foil jacket
Applications	: Internet of Things (IoT), sensors, home security products, smart remote control, wireless mouse/ keyboard, toys, smart meters, medical/ smart healthcare, thermometers, dispensers
Average Weight	: 23g

Model No.: **GN15A**

FOR INDUSTRIAL MARKET ONLY

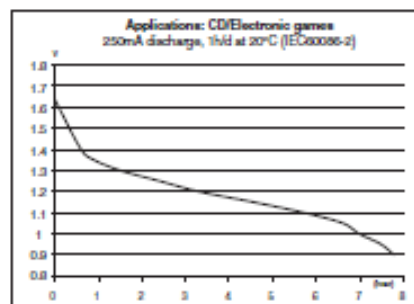
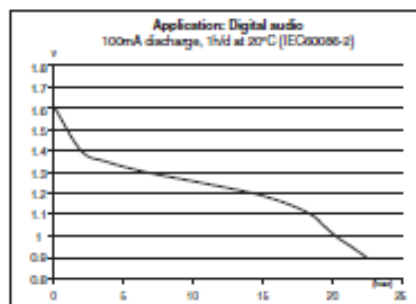
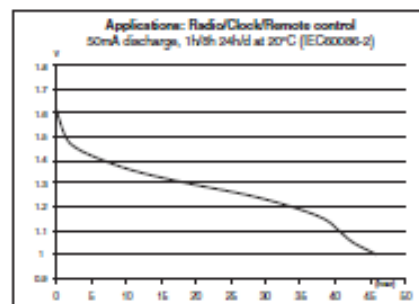
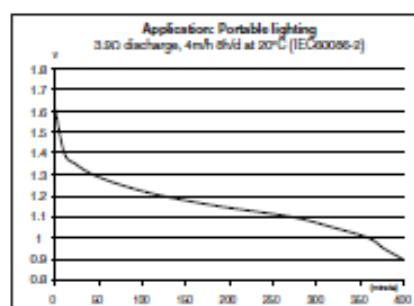
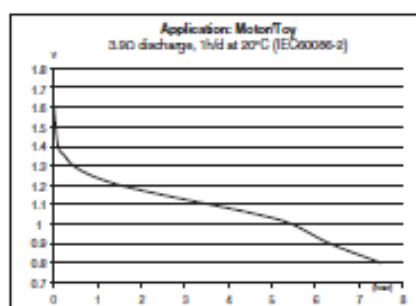
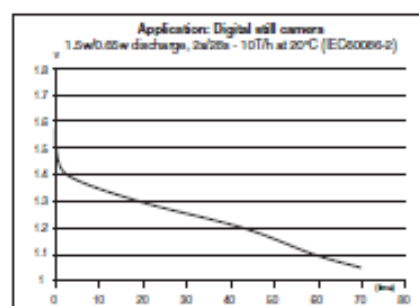


Unit : mm

Cross References:

GP	JIS	IEC	Eveready	Duracell
15A	LR6	LR6	E91	MN1500

The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty. For applications other than those described here, please consult your nearest GP Sales and Marketing Office or Distributors.

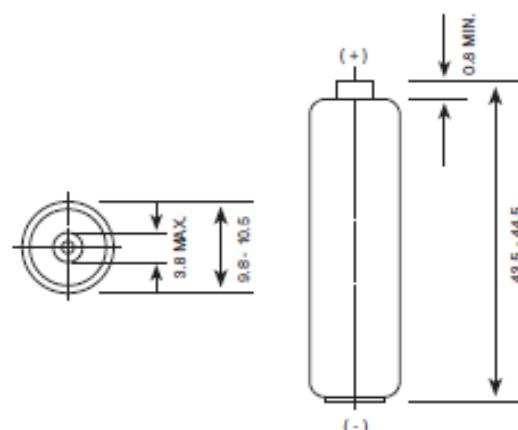


NO MERCURY AND CADMIUM ADDED

Description	: Mercury & Cadmium Free Alkaline Manganese Battery, AAA Size
Chemical System	: Alkaline Manganese
Nominal Voltage	: 1.5 Volts
Nominal Dimensions	: $\phi 10.5$ mm x 44.5 mm
Terminals	: Protruded positive (+) and flat negative (-) contacts
Jacket	: Foil jacket
Applications	: Internet of Things (IoT), sensors, home security products, smart remote control, wireless mouse/ keyboard, toys, smart meters, medical/ smart healthcare, thermometers, dispensers
Average Weight	: 11.5g

Model No.: **GN24A**

FOR INDUSTRIAL MARKET ONLY

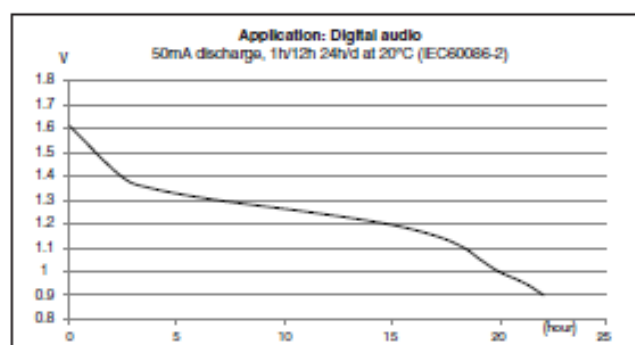
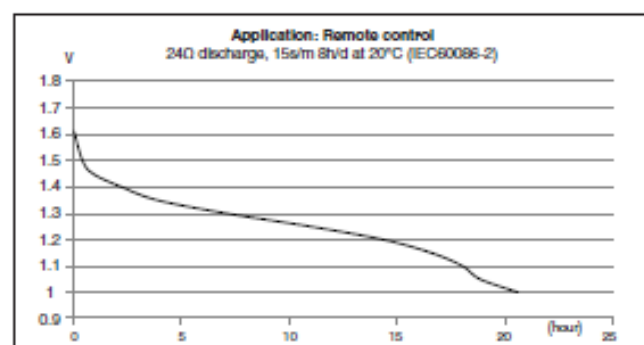
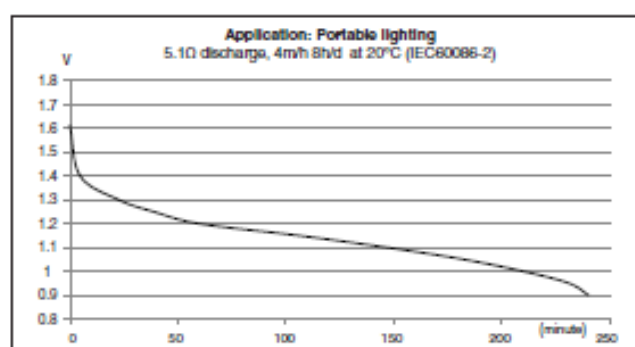
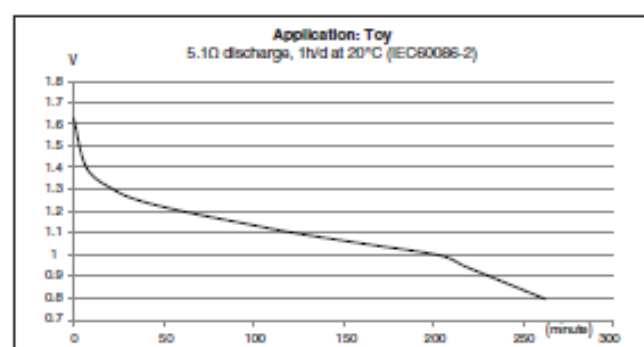


Unit : mm

Cross References:

GP	JIS	IEC	Eveready	Duracell	Varta
24A	LR03	LR03	E92	MN2400	4003

The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty. For applications other than those described here, please consult your nearest GP Sales and Marketing Office or Distributors.



Model No.: **GP13A**

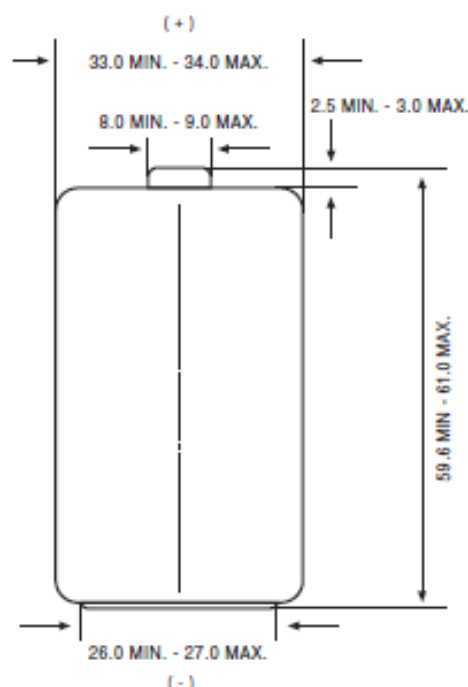
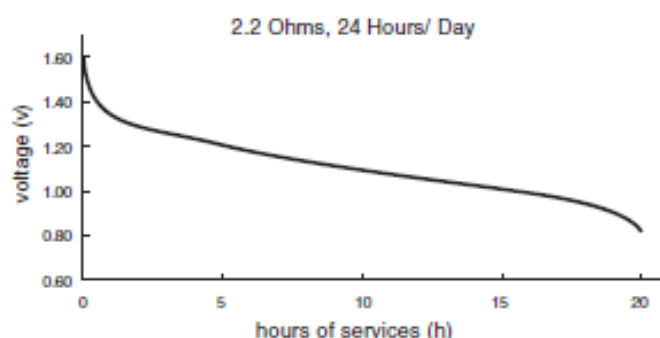
NO MERCURY ADDED	
Description	: Mercury & Cadmium Free Alkaline Manganese Battery, D Size
Chemical System	: Alkaline Manganese
Nominal Voltage	: 1.5 Volts
Nominal Dimensions	: $\phi 34$ mm x 61 mm
Terminals	: Protruded positive (+) and flat negative (-) contacts
Jacket	: Foil jacket
Applications	: All electronic devices, e.g. transistor radios, cassette recorders, toys, alarm clocks, portable fans, portable hand-tools.
Shelf Life	: 10 years at 20°C in a well ventilated area
Average Weight	: 135g

Cross References:

GP	JIS	IEC	Energizer	Duracell	Varta
13A	LR20	LR20	E95	MN1300	4020

Typical Service Life:

Discharge Resistance	Discharge Condition	End Point Voltage	Service Life
2.2 Ohms	24 Hrs/ Day	0.9V	19 Hrs



Unit : mm

The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty. For applications other than those described here, please consult your nearest GP Sales and Marketing Office or Distributors.

www.gpbatteries.com

Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.
Copyright© GPI International Ltd. • All rights reserved

Member
Gold Peak Group

06100

Model No.: **GP14A**

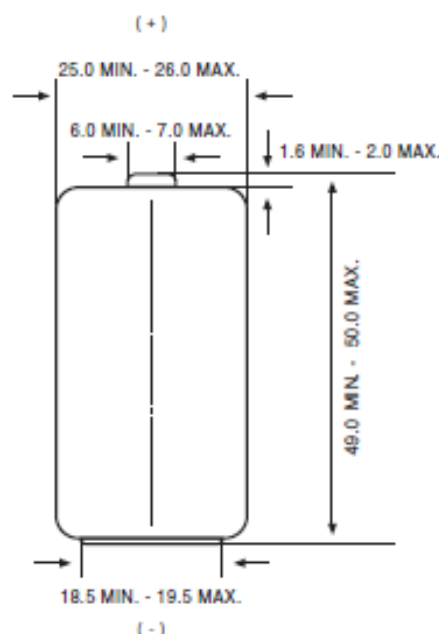
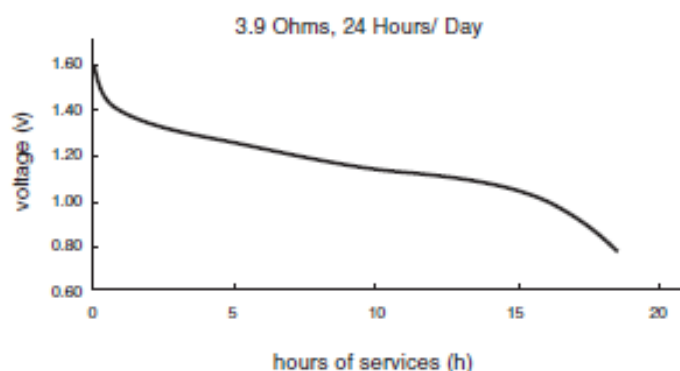
NO MERCURY ADDED	
Description	: Mercury & Cadmium Free Alkaline Manganese Battery, C Size
Chemical System	: Alkaline Manganese
Nominal Voltage	: 1.5 Volts
Nominal Dimensions	: $\phi 26$ mm x 50 mm
Terminals	: Protruded positive (+) and flat negative (-) contacts
Jacket	: Foil jacket
Applications	: All electronic devices, e.g. transistor radios, cassette recorders, toys, alarm clocks, lighting & torches, portable fans.
Shelf Life	: 10 years at 20°C in a well ventilated area
Average Weight	: 60g

Cross References:

GP	JIS	IEC	Energizer	Duracell	Varta
14A	LR14	LR14	E39	MN1400	4014

Typical Service Life:

Discharge Resistance	Discharge Condition	End Point Voltage	Service Life
3.9 Ohms	24 Hrs/ Day	0.9V	18 Hrs



Unit : mm

The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty. For applications other than those described here, please consult your nearest GP Sales and Marketing Office or Distributors.

www.gpbatteries.com

Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.

Copyright© GP| International Ltd. - All rights reserved

Model No.: **GN1604A-2**

FOR INDUSTRIAL MARKET ONLY

NO MERCURY AND CADMIUM ADDED

Description	Alkaline Manganese 9V Battery
Chemical System	Alkaline Manganese Dioxide
Nominal Voltage	9.0 Volts
Operating Temp.	-18°C ~ 50°C, 65±20%RH
Storage Temp.	-20°C ~ 30°C, 65±20%RH
Nominal Dimensions	Refer to drawing
Terminal	Miniature snap fasteners
Jacket	Printed metal jacket
Application	All electronic devices
Nominal Weight	47g

Cross References:

GP	JIS	IEC	Eveready	Duracell
1604A	6LR61	6LR61	522	MN1604

Electrical Characteristics

Test Items	Test Conditions 20±2°C	Specification (Volt), min	
		Initial	1 year
OCV		9.2V	9.0V
CCV	180Ω ± 0.5%, 0.3s	8.8V	8.5V

Discharge Capacity

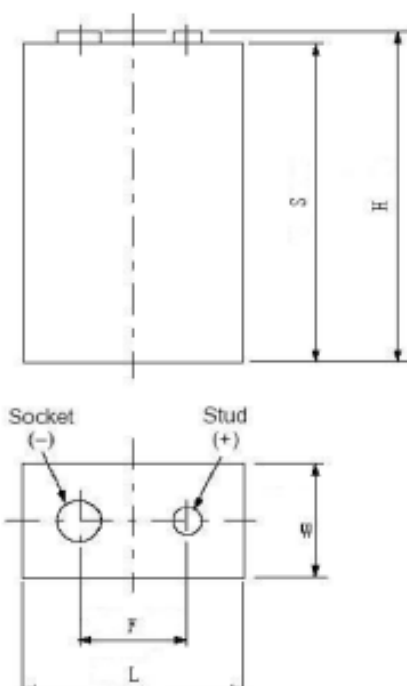
Test Items	Test Conditions 20±2°C, 55±20%RH (EPV = End Point Voltage)	Specification (Hours), MAD	
		Initial	1 year
Service life at 20±2°C	620Ω 2H/D (EV=5.4V)	49.0	47.0
	270Ω 1H/D (EPV=5.4V)	20.0	19.0
	Background 10KΩ Pulse: 620Ω 24H, 1s/H (EPV=7.5V)	19.5	18.0
	35mA 24H/D (EPV=5.4V)	14.0	13.0

* Storage performance are estimated.

www.gpbatteries.com

Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.
Copyright © GPI International Ltd. - All rights reserved

Dimensions



/	min	max
H	46.5	48.5
S	43.7	44.7
F	12.45	12.95
L	25.3	26.1
W	16.3	17.1

Unit : mm

The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty. For applications other than those described here, please consult your nearest GP Sales and Marketing Office or Distributors.