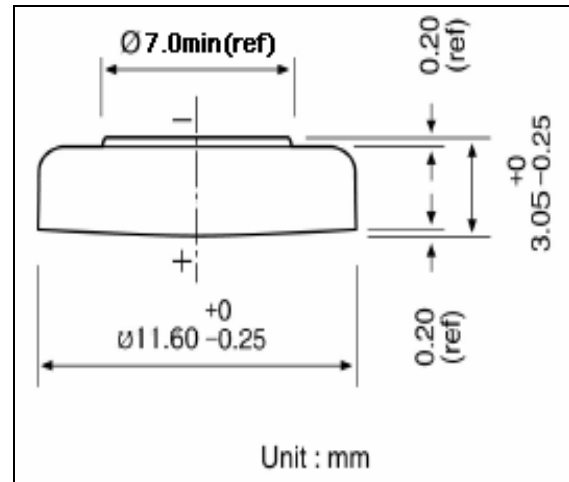


Type : Mercury and Lead Free Button Cell
Chemical System : Zinc/Manganese Dioxide
Nominal Voltage : 1.5Volts
Nominal Dimensions : $\varnothing 11.6\text{mm} \times 3.05\text{mm}$
Application : Watch (with alarm), calculator, electronic toys, melody card, ... etc.
Average Weight : 1.0g
Date Code : Unless otherwise specified, each cell Will carry a numeric year code and an alphabetical month code.
Shelf Life : 12 months shelf life after delivery .
Close Circuit Voltage : 1.30Volts (min.)(load resistor 300Ω at $20 \pm 2^\circ\text{C}$ for 0.1 to 2 seconds)
Nominal Service Life : 130 hrs (load $3.9\text{k}\Omega$ to cut off 1.0V under $20 \pm 2^\circ\text{C}$)
Average Service Capacity : 44mAh (load $3.9\text{k}\Omega$ to cut off 1.0V under $20 \pm 2^\circ\text{C}$)

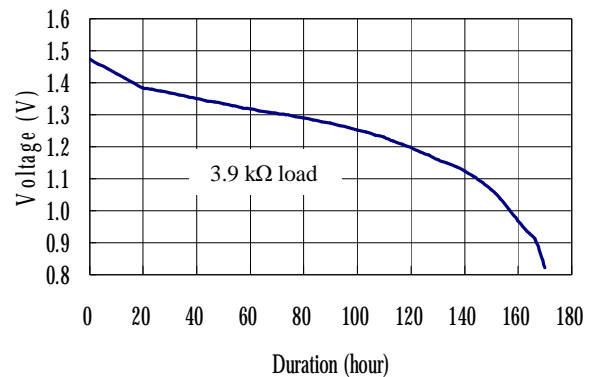
Cross References:

IEC	Maxell	Duracell	Others
LR54	JR1130	LR54	V10GA, AG10

Model No.: **GP189F**



Typical discharge curve when 3.9kohm load



Typical Discharge characteristics at $20 \pm 2^\circ\text{C}$

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.

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