

**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** : Not less than 90% of the service capacity within first year storage at  $20 \pm 2 \text{ }^\circ\text{C}$  55  $\pm$  20 %RH; Warranty 1 year.

**Close Circuit Voltage** : 1.30Volts (min.)( load resistor 300 $\Omega$  at  $20 \pm 2 \text{ }^\circ\text{C}$  for 0.1 to 2 seconds)

**Nominal Service Life** : 130 hrs (load 3.9k $\Omega$  to cut off 1.0V under  $20 \pm 2 \text{ }^\circ\text{C}$ )

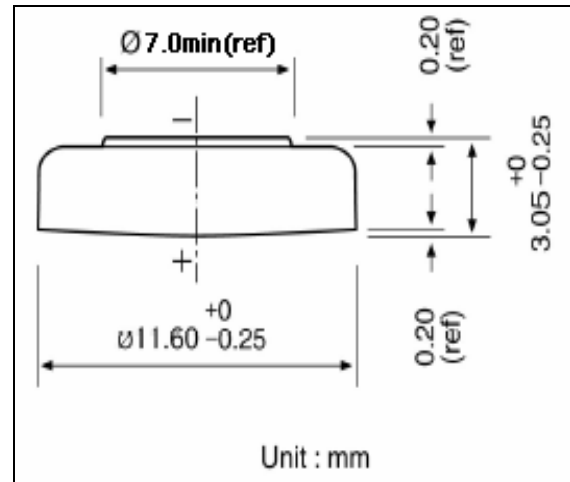
**Average Service Capacity** : 44mAh (load 3.9k $\Omega$  to cut off 1.0V under  $20 \pm 2 \text{ }^\circ\text{C}$ )

Cross References:

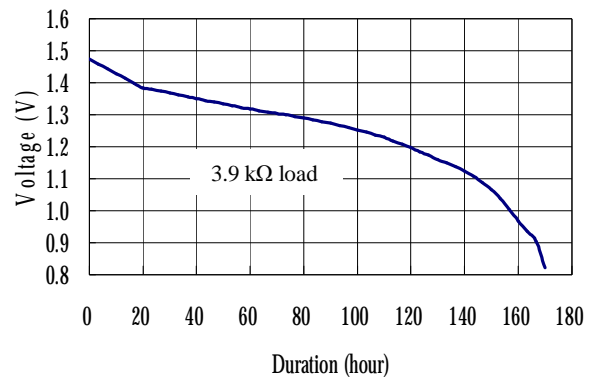
| IEC | Maxell | Duracell | Others |
|-----|--------|----------|--------|
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|      |        |      |             |
|------|--------|------|-------------|
| LR54 | JR1130 | LR54 | V10GA, AG10 |
|------|--------|------|-------------|

Model No.: **GP189F**



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



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