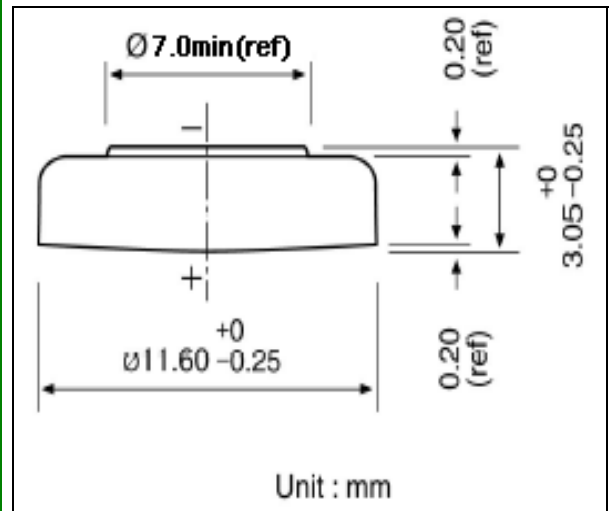
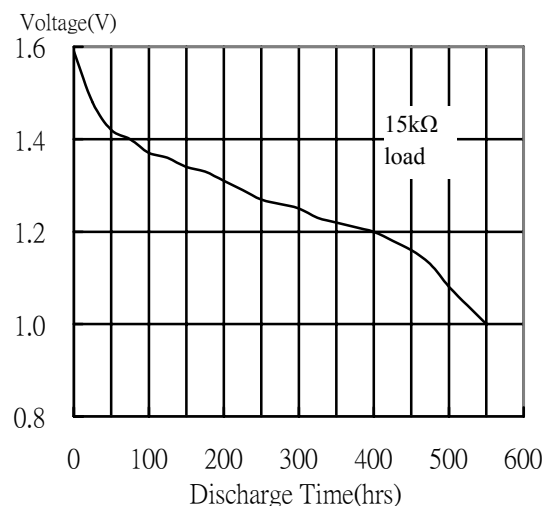


Model No.: GP189

Type	: Alkaline Low Drain Button Cell			
Chemical System	: Alkaline 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. , not less than 85% of the service capacity with third year storage at $20 \pm 2^\circ\text{C}$ 45-75%RH			
Close Circuit Voltage	: 1.30Volts (min.)(load resistor 100Ω at $20 \pm 2^\circ\text{C}$ for 0.1 to 2 seconds)			
Nominal Service Life(to 1.0V at $20 \pm 2^\circ\text{C}$)	: 660hrs (at $20\text{ k}\Omega$ load) 140 days (at $100\text{ k}\Omega$ load)			
Average Service Capacity (to 1.0V at $20 \pm 2^\circ\text{C}$)	: 44mAh(at $15\text{ k}\Omega$ load)			
Cross References:				
IEC	JIS	Eveready	Varta	Others
LR54	LR1130	189	V10GA	LR54



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



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