

## NIMH Size: D 10000 mAh

Item No.: 23741  
 Type Designation ANSI: D (Mono)  
 Designation IEC: HR20  
 System: Nickel-metal hydride battery (NiMH)

Nominal Voltage: 1.2 V  
 Nominal Capacity: 10000 mAh

Dimensions min. max.  
 Height: 60.5 mm 61.5 mm  
 Diameter: 32.3 mm 33.0 mm

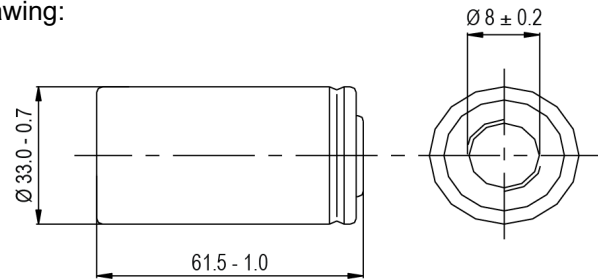
Weight: 174 g approx.

Internal Resistance:  $\leq 6 \text{ m}\Omega$  at 1 kHz

Picture:



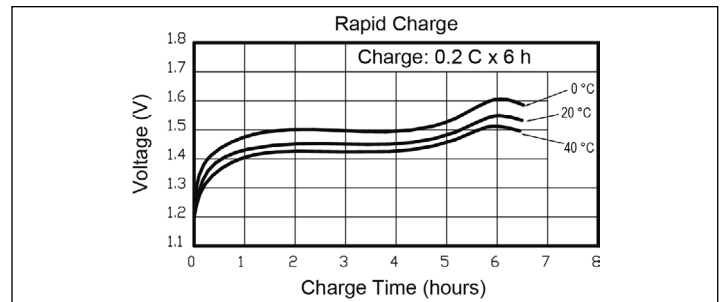
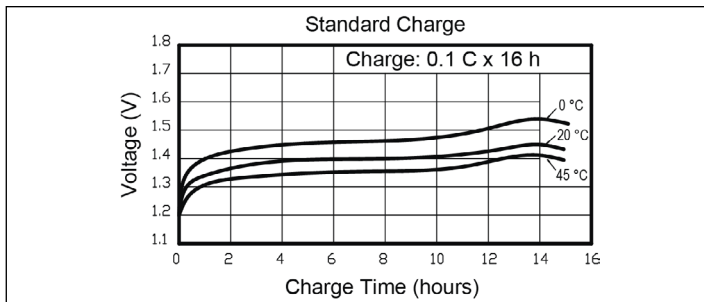
Drawing:



## Charge Characteristics

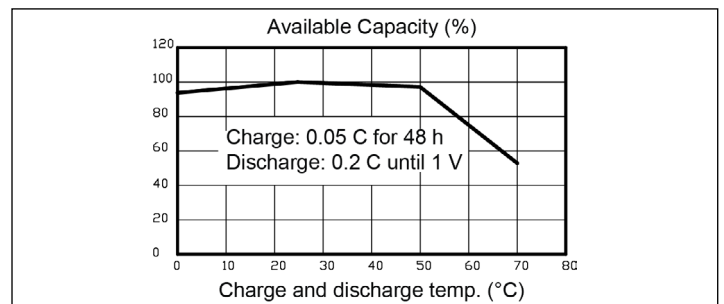
Standard Charge: 16 h x 0.1 C (1000 mA)

Rapid Charge: 6 h x 0.2 C (2000 mA)



## Discharge Characteristics

End 1.0 V  
 0.2 C (2000 mA): 310 min



## Performance Characteristics

Operating Temperature: 0 °C to +50 °C  
 Storage Temperature: -20 °C to +30 °C  
 IEC Cycle life test: > 500 x

## Cycle life performance (IEC)

Cycle number	Charge	Rest	Discharge
1	0.1 C <sub>r</sub> A for 16 h	none	0.25 C for 2.20 h
2 to 48	0.25 C <sub>r</sub> A for 3.10 h	none	0.25 C for 2.20 h
49	0.25 C <sub>r</sub> A for 3.10 h	none	0.25 C to 1.0 V/cell
50	0.1 C <sub>r</sub> A for 16 h	1 h to 4 h	0.2 C <sub>5</sub> A to 1.0 V/cell

## Safety Notes

*Do not disassemble and do not mix with used or other battery types.*

*Do not dispose to fire.*

*Remove batteries when not in use for long periods.*

*Do not short circuit batteries, permanent damage to batteries may result.*

*Do not incinerate or mutilate batteries, they may burst or release toxic material.*

*Do not solder directly to cells or batteries.*

*Do not subject batteries to adverse condition such as extreme temperature, deep cycling and excessive overcharge/overdischarge.*

*Avoid batteries being used in an airtight compartment. Ventilation should be provided inside the battery compartment; otherwise batteries may generate hydrogen gas, which could cause an explosion if exposed to an ignition source.*

*If there is any noise, excessive temperature or leakage from a battery, stop its use immediately.*

*When the battery is hot, do not touch or handle it, until it has cooled down.*

*Do not remove the outer sleeve from a battery pack nor cut into its housing.*

*Do not attempt to take batteries apart or subject them to pressure or impact. Heat may be generated or fire may result.*

*The alkaline electrolyte is harmful to eyes and skin, and it may damage clothing upon contact.*

*Keep away from children. If swallowed, contact a physician at once.*

*Charge batteries prior to use.*

*When using a new battery for the first time or after long term storage, fully charge the battery before use.*

*Use the correct charger for Ni-Cd or Ni-MH batteries.*

*Do not reverse charge batteries.*

*Store batteries in a cool dry place.*

*Do not mix the batteries with other battery brands or batteries of a different chemistry such as alkaline and zinc carbon.*

*Do not mix new batteries in use with semi-used batteries, over-discharge may occur.*

*When connecting a battery pack to a charger, ensure correct polarity.*

*When the battery power is down during use, switch off the device to avoid overdischarge.*

*When the battery is not being used, disconnect it from the device.*

*After use, if the battery is hot, before recharging it, allow it to cool in a well-ventilated place out of direct sunlight.*

*Never put a battery into water or seawater.*

*During long term storage, battery should be charged and discharged once every 3 months.*

*(Rechargeable) batteries must not be disposed of with household waste. Their components have to be supplied separately to the recycling or disposal, because toxic and dangerous ingredients can harm the environment if not disposed of sustainably. As a consumer, you are obliged to return them at the end of their service lives to the manufacturer, the sales outlet or established for this purpose, public collection points for free. Details regulates the respective country's law. The symbol on the product, the instruction manual and / or the packaging draws attention to those provisions. With this kind of material separation, recovery and disposal of waste (rechargeable) batteries you make an important contribution to protecting our environment.*