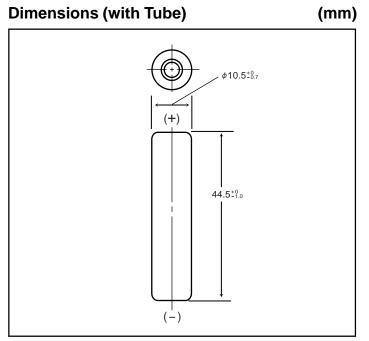
HHR60AAAH Cylindrical AAA size (HR 11/45)



Specifications

	mm	inch
Diameter	10.5 +0/-0.7	0.41 +0/-0.03
Height	44.5 +0/-1.0	1.75 +0/-0.04
Approximate	Grams	Ounces
Weight	13	0.46

Nominal Voltage		1.2V		
Discharge		Average ²	550 mAh	
Capacity ¹		Rated (Min.)	500 mAh	
Approx. Internal impedance at 1000Hz at charged state.		35mΩ		
Charge		Standard	50mA x 16hrs.	
		Rapid ³	250mA x 2.4 hrs.4	
		Low Rate	25mA x 32 hrs.	
			17mA x 48 hrs.	
t ure	Charge	Standard	0°	°F
			-10°C to 60°C	14°F to 140°F
		Rapid	-10°C to 45°C	14°F to 113°F
Discharge		-10°C to 60°C	14°F to 140°F	
Ambient Temperature	Storage	< 1 year	-20°C to 35°C	-4°F to 95°F
		< 6 months	-20°C to 45°C	-4°F to 113°F
		< 1 month	-20°C to 55°C	-4°F to 131°F
		< 1 week	-20°C to 65°C	-4°F to 149°F

¹ After charging at 0.1lt for 16 hours, discharging at 0.2lt.

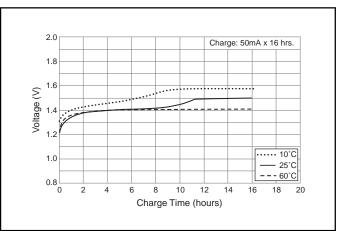
² For reference only.

³ Need specially designed control system Control System: dT/dt cut-off; 1 to 2°C/min -△V cut-off; -△V per cell = 5 to 10 mV T-control; T=65°C Rapid charger timer; 2.4h (at 1.25a) Trickle timer; within 2h

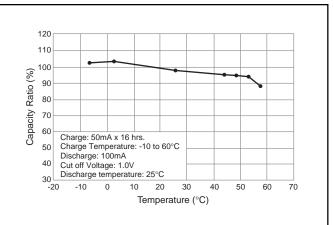
⁴ With control system

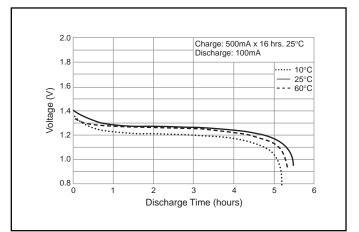
Battery performance and cycle life are strongly affected by how they are used. In order to maximize battery safety, please consult Panasonic when determining charge / discharge specs, warning label contents and unit design.

Typical Charge Characteristics



Typical Discharge Characteristics





- Note: [It] was previously expressed as [C]. [It] is an IEC standard expression for the amount of charge or discharge current and is expressed as: It(A) = Cn (Ah)/1h
 - * [It] is the reference test current in ampres
 - [Cn] is the rated capacity of the cell or battery in Ampere-hours.
 - $\mathsf{n}=\mathsf{the}\ \mathsf{time}\ \mathsf{base}\ [\mathsf{hours}]\ \mathsf{for}\ \mathsf{which}\ \mathsf{the}\ \mathsf{rated}\ \mathsf{capacity}\ \mathsf{is}\ \mathsf{declared}$

Panasonic NICKEL METAL HYDRIDE HANDBOOK AUGUST 2005 This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact Panasonic for the latest information.