HHR210AA/B cylindrical AA size (HR 15/51)
Dimensions (with Tube)


## Specifications

|  | mm | inch |
| :---: | :---: | :---: |
| Diameter | $14.5+0 /-0.7$ | $0.57+0 /-0.3$ |
| Height | $50.5+0 /-1.0$ | $1.99+0 /-0.5$ |
| Approximate <br> Weight | Grams | Ounces |
|  | 29 | 1.02 |


| Nominal Voltage |  |  | 1.2 V |  |
| :---: | :---: | :---: | :---: | :---: |
| Discharge Capacity* |  | Average** | 2080 mAh |  |
|  |  | Rated (Min.) | 2000mAh |  |
| Approx. intemal Impedance at 1000 Hz at charged state. |  |  | $25 \mathrm{~m} \Omega$ |  |
| Charge |  | Standard | $200 \mathrm{~mA}(0.1 \mathrm{lt}) \times 16 \mathrm{hrs}$. |  |
|  |  | Rapid | 1200 mA (1lt) $\times 2$ hrs. |  |
|  | Charge | Standard | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ |
|  |  |  | $0^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}$ | $32^{\circ} \mathrm{F}$ to $113^{\circ} \mathrm{F}$ |
|  |  | Rapid | $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ | $32^{\circ} \mathrm{F}$ to $113^{\circ} \mathrm{F}$ |
|  | Disc harge |  | $-10^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$ | $14^{\circ} \mathrm{F}$ to $149^{\circ} \mathrm{F}$ |
|  | Storage | <1 year | $-20^{\circ} \mathrm{C}$ to $35^{\circ} \mathrm{C}$ | $-4^{\circ} \mathrm{F}$ to $95^{\circ} \mathrm{F}$ |
|  |  | <3 months | $-20^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}$ | $-4^{\circ} \mathrm{F}$ to $113^{\circ} \mathrm{F}$ |
|  |  | <1 month | $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$ | $-4^{\circ} \mathrm{F}$ to $131^{\circ} \mathrm{F}$ |

${ }^{*}$ After charging at 0.1 lt for 16 hours, discharging at 0.2 lt .
** For reference only.
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.

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: $\mathrm{It}(\mathrm{A})=\mathrm{Cn}(\mathrm{Ah}) / 1 \mathrm{~h}$

* [It] is the reference test current in ampres
* [ Cn ] is the rated capacity of the cell or battery in Ampere-hours. $\mathrm{n}=$ the time base [hours] for which the rated capacity is declared


## Typical Charge Characteristics



## Typical Discharge Characteristics




