## Super High Power Series

## Nickel-Metal Hydride

## VH AA

Saft continues the extension of the Super High Energy series with the powerful VH AA.

This cell, designed to fit private mobile radios, as weel as cordless phones, is also very well adapted for any application where cycling and energy are required, such as personal care (shavers, vacuum cleaners...).

To meet customers' requirements, Saft provides custom-designed and standardized battery packs.

For your battery design and system needs, please contact Saft's engineers.

## Applications

- Private mobile radios
- Personal care products
- Professionnal appliances
- Handheld terminals

Main advantages

- Super high capacity
- Fast charge / Fast discharge
- Extended cycle life
- Improved storage ability
- Environmentally preferred

Technology

- Foam positive electrode
- Metal-hydride negative electrode

Temperature range in discharge $0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$

## Storage

Recommended: $+5^{\circ} \mathrm{C}$ to $+25^{\circ} \mathrm{C}$
Relative humidity: $65 \pm 5 \%$

| Electrical characteristics |  |
| :--- | ---: |
| Nominal voltage (V) | 1.2 |
| Typical capacity (mAh)* | 1300 |
| IEC minimum capacity (mAh)* | 1200 |
| IEC designation | HR |
| Impedance at $1000 \mathrm{~Hz}(\mathrm{~m} \Omega)$ | $<25$ |

* Charge 16 h at $\mathrm{C} / 10$, discharge at $\mathrm{C} / 5$.

| Dimensions |  |
| :--- | ---: |
| Diameter $(\mathrm{mm})$ | $13.9 \pm 0.1$ |
| Height $(\mathrm{mm})$ | $48.9 \pm 0.3$ |
| Top projection $(\mathrm{mm})$ | $0.8 \pm 0.2$ |
| Top flat area diameter $(\mathrm{mm})$ | 5.6 |
| Weight $(\mathrm{g})$ | 25 |

Dimensions are given for bare cells.

| Charge conditions <br> Rate | Time (h) | Temp. ( ${ }^{\circ} \mathrm{C}$ ] | Charge current (mA) |
| :---: | :---: | :---: | :---: |
| Fast | ~1 | O to + 35 | up to 1200 |
| Quick | 4-5 | O to + 40 | up to 300 |
| Standard | 16 | O to + 40 | 120 |
| Trickle * |  |  | 30 |
| End of charge cut-off is requested: -dV or dT${ }^{\circ} \mathrm{C} / \mathrm{dt}$. <br> * Trickle charge follows fast charge. |  |  |  |
| Maximum discharge current |  |  |  |
| Continuous (A) at + | $0^{\circ} \mathrm{C}$ |  | 3.6 |

Typical performances For graphs shown, $C$ is the $\mathbb{E E C}_{5}$ capacity.
Dimensions are in mm.


Data are given for single cells. Please consult Saft for utilization of cell outside this datasheet.

Data in this document are subject to change without notice and become contractual only after written confirmation by Saft.

Discharge at different rates, after charge at $\mathrm{C} / 10$


Discharge at different rates, after charge at 1C



Impedance versus cycle number


## Saft

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