

VH AAA 700

Super High Energy series

Nickel-Metal Hydride
Fast Charge Application



Designed for cellular and cordless phones battery packs, the new Saft upgraded cell, VH AAA 700, offers high capacity performances with a typical capacity of 735 mAh. A VH AAA 700 only weighs 12 grams and lasts for over 500 cycles.

To meet customers requirements, Saft will provide custom-designed and standardized battery packs. For your battery design and system needs, please contact Saft's engineers.

Applications

- Cellular phones
- Analog and digital phones
- Communicators and personal pockets computers

Main advantages

- Super high capacity
- Fast charge / Fast discharge
- Extended cycle life

Technology

- Foam positive electrode
- Metal-hydride negative electrode
- Alkaline electrolyte

Temperature range in discharge

0°C to +40°C

Storage

Recommended: +5°C to +25°C

Extended: -20°C to +40°C

(< 1 month)

Relative humidity: 65 ± 5%

Please consult Saft for utilization of cell outside this specification

Electrical characteristics

| | |
|-----------------------------------|----------|
| Nominal voltage (V) | 1.2 |
| IEC typical capacity (mAh) at C/5 | 735 |
| IEC minimum capacity (mAh) at C/5 | 690 |
| IEC designation | HR 10/43 |
| Impedance at 1000 Hz (mΩ) | 20 |

Dimensional characteristics

| | |
|-----------------------------|------------|
| Diameter (mm) | 10.0 ± 0.1 |
| Height (mm) | 44.0 ± 0.3 |
| Top projection (mm) | 0.7 ± 0.3 |
| Top flat area diameter (mm) | 5.0 |
| Weight (g) | 12.0 |

Dimensions are given for bare cells

Charge conditions

| Rate | Time (h) | Temp. (°C) | Charge current (mA) |
|-----------|----------|------------|---------------------|
| Fast* | ~ 1 | 0 to +40 | 700 |
| Quick | ~ 4 | 0 to +40 | 234 |
| Standard | 16 | 0 to +40 | 70 |
| Trickle** | | -10 to +40 | 15 |

* Fast charge must be controlled. Please consult Saft

** Trickle charge follows fast, quick or standard charge

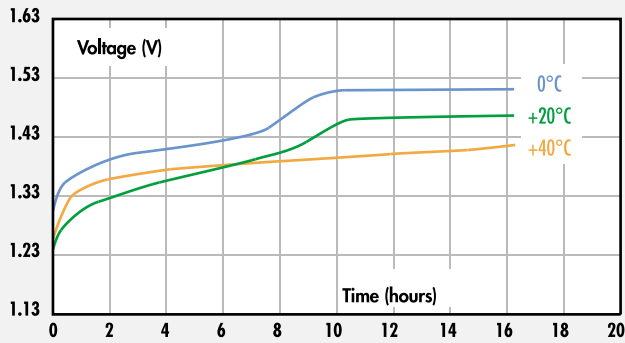
Maximum discharge current

Continuous (mA) at +20°C 2100

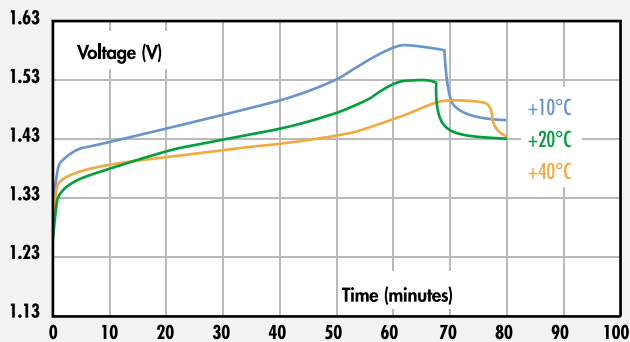
VH AAA 700

Typical performances

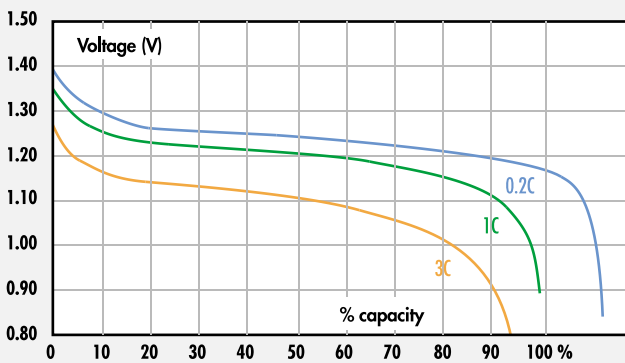
For graphs shown,
C is the IEC C₅ capacity.



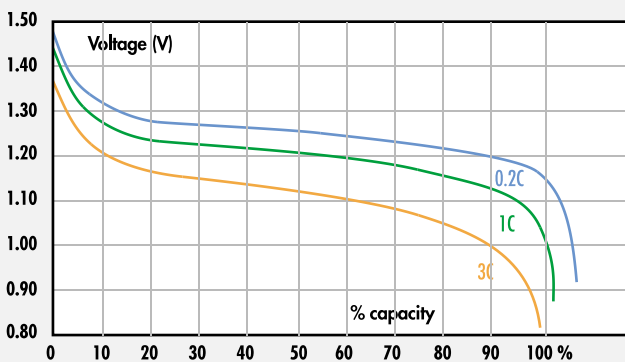
Voltage in slow charge
current 0.1 C



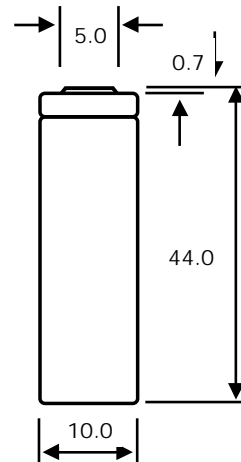
Voltage in fast charge
current C



Voltage in discharge at +20°C
after slow charge
0.1 C
x 16 hours
at +20°C



Voltage in discharge at +20°C
after fast charge
1 C x 1.2 hours
at +20°C



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