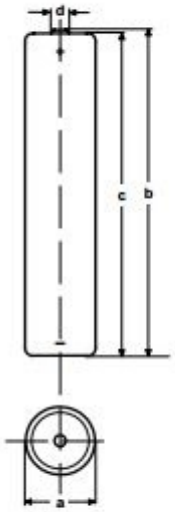
VARTA
CONSUMER BATTERIES

**5703**

# Data Sheet

Sealed rechargeable Ni-MH Cylindrical Cell (Consumer Version)




| | |
|---|---|
| **Designation IEC (Draft):** | **HR 03** |
| Size: | **AAA** |
| Nominal Voltage: | **1.2 V** |
| Rated Capacity: | **1000 mAh** |
| Internal Resistance DC, fully charged: | **80 mOhm** |
| Impedance AC at 1kHz, fully charged: | **40 mOhm** |

### Typical Capacity at:

| | |
|---|---|
| 0.2 C / 1.00 V: | **1000 mAh** |
| 1.0 C / 0.90 V: | **850 mAh** |
| Max Discharge Current (continuous / 0.8 V): | **2400 mA** |
| Max Short Time Current (2 sec / 0.75 V): | **3000 mA** |

### Dimensions (including shrink sleeve/label):

| | |
|---|---|
| Diameter a: | **$10.5\ ^{0}_{-1.0}$ mm** |
| Height b: | **$44.5\ ^{0}_{-1.0}$ mm** |
| Shoulder Height c: | **$43.5\ ^{0}_{-1.0}$ mm** |
| Cap Diameter d: | **$3.8\ ^{0}_{-0.5}$ mm** |
| Volume: | **3.8 $cm^3$** |
| Weight approx: | **13 g** |
| Energy Density: | **316 Wh/l** |
| Specific Energy: | **93 Wh/kg** |

### Charge Conditions at:

| | |
|---|---|
| Standard Charge: | **100 mA, 16 h** |
| Fast Charge: | **1000 mA (dT/dt, -dV)** |
| Trickle Charge (0.03 - 0.05 C): | **30 – 50 mA** |

### Temperatures (recommended / permissible) at:

| | |
|---|---|
| Storage: | **-20° C ... 30° C / -20° C ... 50° C** |
| Charge: | **0° C ... 30° C / 0° C ... 40° C** |
| Fast Charge: | **0° C ... 30° C / 0° C ... 40° C** |
| Discharge: | **0° C ... 30° C / 0° C ... 50° C** |

### Life Expectancy at Cycling: **more than 500 cycles**

All data contained herein is for single cells.
For battery applications, performance data may vary from single cell data, depending on specific battery configuration.