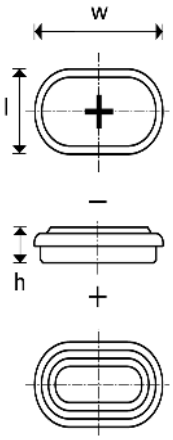
V 550 HRA

Rechargeable Ni-MH Button

Preliminary Datasheet



Type Number:	55855	
System:	Nickel Metal Hydride/ KOH Electrolyte	
Nominal Voltage [V]:	1.2	
Nominal Capacity C [mAh]:	550	
Typical Capacity C [mAh]:	565	
at 11 0mA / 1.00 V		
Weight, approx. [g]	14.5	
Dimensions [mm]:	**min.**	**max.**
Length [l]:	23.9	24.1
Width Facing [w]:	33.9	34.1
Height [h]:	6.3	6.8*
UL Recognition:	pending	
Coding:	Manufacturing 5 digit code (123 = day/4 = year/ 5 = version)	
Temperature Ranges [°C]	**min.**	**max.**
Storage: less than 1 week	-40	85
Less than 1 month	-40	65
Discharge:	-30	85
Charge:	-20	85
Charging Method:		
Recommended Charging:	Temperature compensated CC-CV charge (for further information please consult VARTA)	
Normal Charging:	55 mA for 14 – 16 h	
Accelerated Charging (20°C):	165 mA for 4 h	
Voltage and time controlled		
Fast Charging (20°C):	550 mA (–dV; dT)**	
Trickle Charging:	5.5 mA	
Max. Charge Voltage	1.55 V	
Overcharge (20°C):	55mA up to 6 month	
Charge Retention [%] at 20°C:	>60%	
Capacity available after 6 month Storage at 20°C		
Internal Resistance [Ohm]:	0.1	
at charged cells, 20°C, DC: 0.2 CA/2 CA, (IEC 61951-2)		
Impedance [Ohm]:	0.015	
at charged cells, 20°C, AC: 1kHz, (IEC 61951-2)		
Typical Capacities [mAh]:		
at 20°C 550 mA / 0.9 V	500	
at 20°C 1.65 A / 0.9 V	300	
at -20°C 550mA / 0.7 V	500	
Max. Discharge Current (cont.) [mA]:	3000	
Life Expectancy (typical):		
IEC Cycle:	1000 Cycles (IEC 61951-2)	
Trickle Charge:	up to 5 years (20°C)	
Trickle Charge:	up to 3 years (45°C)	

*Height could increase by 0.4mm with cycles and/or at elevated temperatures

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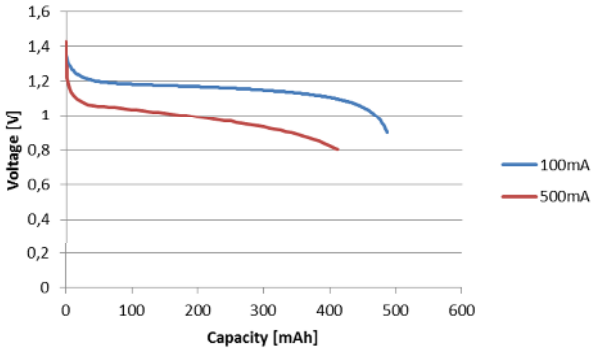
**(-dv=5-10 mV/ cell; dT/ dt=0.7°C/min), Capacities based on normal charging

Typical Discharge Profiles (not guaranteed)

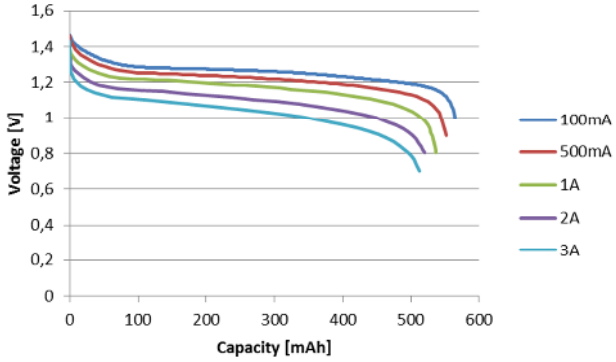
Before each discharge, every cell was charged at RT (23°C) with 100mA for 7 hours.

Before each discharge, test temperature was hold for 3 hours.

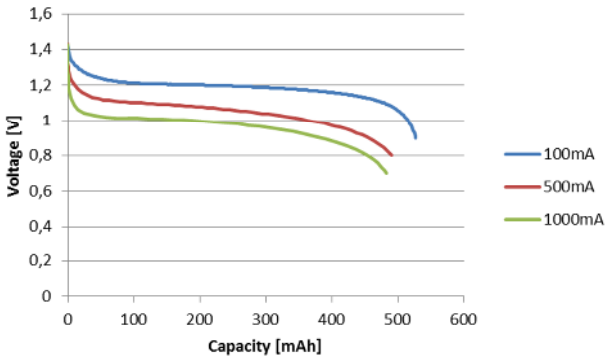
Discharge Profiles 20°C



Discharge Profiles -20°C



Discharge Profiles -30°C



All performance data are single cell data.
Data are typical data and not guaranteed and may vary due to application conditions.

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