



Nickel-Metal-Hydride (Ni-MH)
Rechargeable Button Cells

VARTA Microbattery combines entrepreneurial substance, strategic visions and technological competency for constantly improved products, application oriented designs and innovative product development. For more information please visit our internet page www.varta-microbattery.com

Capacity Range


From V 6 HR to V 650 HRT, from 6 mAh up to 650 mAh – VARTA provides a full programme of rechargeable button cells for all performance requirements.

Quality – Made in Germany

- manufactured on highly automated lines
- direct replacement for Ni-Cd
- no memory effect
- 0% lead, 0% mercury and 0% cadmium
- UL recognition under file BBET2.MH13654

Key Features – Benefits

- Safety: built-in pressure vent guarantees safety in case of mistreatment
- Low self discharge: no handling, no charging – ready to use after storage due to superior self discharge performance
- Cycle Life: extended product life time of more than 1000 cycles (IEC)
- Overcharge capability: cost effective charging system with no need for special components due to patented GCE electrode
- Deep discharge capability: longer lasting shelf-life with high capacity retention after deep discharge
- No leakage: direct mounting on PCB possible due to patented crimp sealing system




V...H
robust

High performance button cell with superior overcharge stability and discharge currents ≤ 2 CA. Based on mass electrode technology, temperature range -25°C to $+65^{\circ}\text{C}$.

Typical Applications:
 ■ Memory Backup ■ Real Time Clock ■ Mobile Light

Type Designation	Type No.	Voltage (V)	Capacity (mAh)
V 15 H	55602	1.2	16
V 40 H	55604	1.2	43
V 80 H	55608	1.2	80
V 150 H	55615	1.2	150
V 200 H	55620	1.2	210
V 250 H	55625	1.2	250
CP 300 H	55630	1.2	300
V 350 H	55635	1.2	380



V...HT
robust85C

High performance button cell with superior overcharge stability and discharge currents ≤ 2 CA at high temperature. Based on mass electrode technology, temperature range -25°C to $+85^{\circ}\text{C}$.

Typical Applications:
 ■ Industrial Electronics ■ Automotive Applications

Type Designation	Type No.	Voltage (V)	Capacity (mAh)
V 65 HT	55707	1.2	70
V 110 HT*	55711	1.2	120
V 150 HT	55715	1.2	150

* 0° - 65°C

Application V...H



Application V...HT



Application V...HR



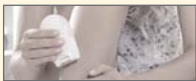
VARTA Microbattery is a leader of Ni-MH button cell technology and received several ecological and industry awards.



Battery Guide

Four button cell families with specific strengths and features provide the ideal battery solution for any application.

	self discharge	over-charge	deep discharge	cycle life	storage behaviour	high rate capability	charge efficiency at high temp.	temperature range
V...H robust	++	++	++	+++	++	+	+	+
V...HT robust85C	++	+++	++	+++	++	+	++	++
V...HR powerful	+	+	+	+++	+	+++	+	+
V...HRT powerful85C	+	+	+	+++	+	++	++	++



V...HR powerful

High rate button cell with superior load capability for discharge currents up to 5 CA.
Based on foam electrode technology, temperature range -25°C to +65°C.

Typical Applications:

- Consumer Electronics ■ Health Care Devices
- Wireless Headsets, Headphones

Type Designation	Type No.	Voltage (V)	Capacity (mAh)
V 6 HR	55996	1.2	6.2
V 20 HR	55902	1.2	21
V 450 HR	55945	1.2	450
V 600 HR	55960	1.2	600



V...HRT powerful85C

High rate and high temperature button cell with superior load capability for discharge currents up to 5 CA at high temperature.
Based on foam electrode technology, temperature range -25°C to +85°C.

Typical Applications:

- Automotive Electronics ■ Server, Computer
- Emergency Light, Solar Light

Type Designation	Type No.	Voltage (V)	Capacity (mAh)
V 18 HRT	55802	1.2	19
V 500 HRT*	55850	1.2	510
V 500 H(R)T	55750	1.2	510
V 650 HRT*	55865	1.2	650

* 0° - 65°C

Application V...HRT



Single cell or assembled power pack – VARTA Button Cells for every application!

Product Overview

Type Designation	Type No.	Voltage (V)	Capacity (mAh)	Diameter (mm)	Height (mm)	Length (mm)	Width (mm)	Weight (g)
V...H robust								
V 15 H	55602	1.2	16	11.5	3.1			1.3
V 40 H	55604	1.2	43	11.5	5.35			1.7
V 80 H	55608	1.2	80	15.5	6.0			4.0
V 150 H	55615	1.2	150		5.85	14.1	25.6	6.0
V 200 H	55620	1.2	210		7.4	14.1	25.6	7.0
V 250 H	55625	1.2	250	25.1	6.7			10.0
CP 300 H	55630	1.2	300	25.1	7.55			11.0
V 350 H	55635	1.2	380	25.1	8.8			13.0
V...HT robust85C								
V 65 HT	55707	1.2	70	15.5	6.0			4.0
V 110 HT*	55711	1.2	120		5.85	14.1	25.6	6.0
V 150 HT	55715	1.2	150		5.85	14.1	25.6	6.0
V...HR powerful								
V 6 HR	55996	1.2	6.2	6.8	2.15			0.28
V 20 HR	55902	1.2	21	11.5	2.25			0.9
V 450 HR	55945	1.2	450		5.6	24.1	34.1	12.5
V 600 HR	55960	1.2	600		6.8	24.1	34.1	14.5
V...HRT powerful85C								
V 18 HRT	55802	1.2	19	11.5	2.3			0.9
V 500 HRT*	55850	1.2	510		6.6	24.2	34.1	14.0
V 500 H(R)T	55750	1.2	510		6.6	24.2	34.1	14.0
V 650 HRT*	55865	1.2	650		6.8	24.2	34.1	15.0

Voltage and Capacity indicated refer to nominal and typical values respectively.

* 0° - 65°C

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