



Button Cells

Lithium-Manganese Dioxide Button Cell (CR) Index

Type	Nominal Voltage (V)	Nominal Capacity mAH	Size		Weight g	Measurement Conditions			Continuous		Pulse Current Max mA
			Dia mm	Height mm		Temp ° C	Load K Ohms	Final Voltage	Discharge Time Hrs	Current max mA	
CR 2016	3.0	75	20	1.6	1.90	20	30	2.50	750	7.0	40
			-0.2	-0.1		-40			350		
CR 2025	3.0	150	20	2.5	2.50	20	15	2.50	750	8.0	45
			-0.2	-0.3		-40			350		
CR 2032	3.0	200	20	3.2	3.00	20	15	2.50	1000	7.0	40
			-0.2	-0.3		-40			510		
CR 1220	3.0	35	12.5	2.0	0.75	20	30	2.50	382	2.5	14
			-0.2	-0.2		-40			165		
CR 1616	3.0	40	16	1.6	1.10	20	30	2.50	450	4.0	20
			-0.2	-0.2		-40			300		
CR 1620	3.0	55	16	2.0	1.70	20	30	2.50	600	4.0	20
			-0.2	-0.2		-40			350		
CR 2430	3.0	270	24.5	3.0	4.20	20	30	2.50	2500	15.0	90
			-0.2	-0.2		-40			800		
CR 2450	3.0	550	24.5	5.0	6.20	20	15	2.50	2500	28.0	100
			-0.2	-0.2		-40			800		

Alkaline Button Cells

Model	Type	Nominal Voltage (V)	Nominal Capacity mA Hr	Dimensions mm		Weight g.
EC-3	LR41	1.5	26	7.9	3.6	0.59
EC-10	LR1130	1.5	64	11.6	3.1	1.11
EC-12	LR43	1.5	110	11.6	4.2	1.6
EC-13	LR44	1.5	128	11.6	5.4	1.95

Ni-Cd. and Ni-MH. Rechargeable Button Cells

Features

Long Service Life:	300 - 1000 Recharge Cycles
High Discharge Flat Voltage	1.2 V at 0.1C over 80% of the discharge cycle
Safety Features	All cells are subjected to 100% safety testing
High Reliability	By using the best available materials and technology

Ni-Cd Button Cell Index

Model	Nominal Voltage V	Nominal Capacity mAH	Dia. mm	Tol. mm	Height mm	Tol. mm	Charge Current mA	Charge Time Hrs	Trickle Current mA	Weight g.
280K	1.2	280	25.1	-0.2	8.6	-0.4	28	14	8	14
170K	1.2	170	25.1	-0.2	6.5	-0.4	17	14	5	10
100K	1.2	100	15.1	-0.2	7.6	-0.4	10	14	3	8
60K	1.2	60	15.1	-0.2	6.2	-0.4	6	14	2	4

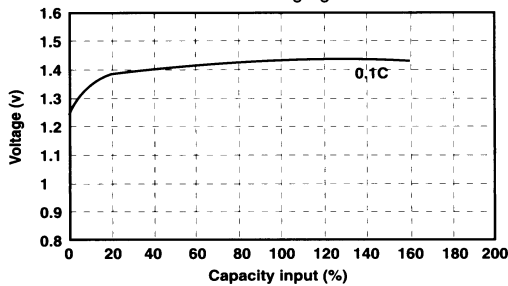
Ni-MH Button Cell Index

Model	Nominal Voltage V	Nominal Capacity mAH	Dia. mm +0 /-0.2	Height mm +0 /-0.4	Charge Current mA	Charge Time Hrs	Trickle Current mA	Weight Grams
EC- 280H	1.2	330	25.1	8.6	33	14	9	14
EC- 170H	1.2	220	25.1	6.5	22	14	6	10
EC- 100H	1.2	110	15.1	7.6	11	14	3	8
EC- 60H	1.2	80	15.1	6.2	8	14	2	4
EC- 30H	1.2	40	11.6	5.5	4	14	1	2
EC- 12H	1.2	15	11.6	3.3	1.5	14	0.4	1.5

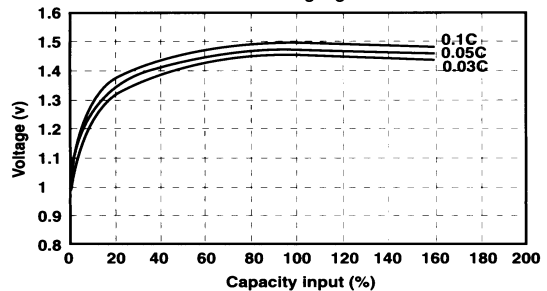
Typical performance of rechargeable button cells

Charging :

charging curve of Ni -MH button cell at 0.1C charging rate.

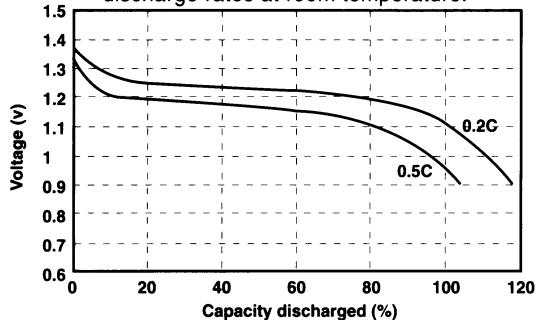


charging curve of Ni -Cd button cell at various charging rates.

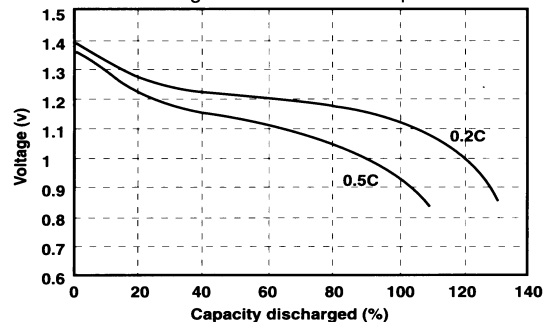


Discharging

Discharge curves of Ni -MH button cell at various discharge rates at room temperature.

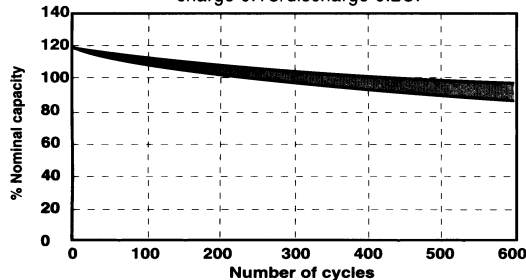


Discharge curves of Ni -Cd button cell at various discharge rates at room temperature.



Cycle Life

cycle life curve of Ni -MH button cell charge 0.1C/discharge 0.2C.



cycle life curve of Ni -Cd button cell charge 0.1C/discharge 0.2C.

