

GP Batteries

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GP Batteries



Primary Batteries

Cylindrical Type

Ultra Plus Alkaline

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Energizer	Other
13AUP	34.2	61.5	1.5	LR20	LR20	E95	D
14AUP	26.2	50.0	1.5	LR14	LR14	E93	C
15AUP	14.5	50.5	1.5	LR6	LR6	E91	AA
24AUP	10.5	44.5	1.5	LR03	LR03	E92	AAA
1604AUP	26.5(L) x 17.5(W) x 48.5(H)		9.0	6LF22	6LF22	522	-

Ultra Alkaline

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Energizer	Other
13AU	34.2	61.5	1.5	LR20	LR20	E95	D
14AU	26.2	50.0	1.5	LR14	LR14	E93	C
15AU	14.5	50.5	1.5	LR6	LR6	E91	AA
24AU	10.5	44.5	1.5	LR03	LR03	E92	AAA
908AU	66.0(L) x 66.0(W) x 111.0(H)		6.0	4LR25	4LR25X	-	-
1604AU	26.5(L) x 17.5(W) x 48.5(H)		9.0	6LF22	6LF22	522	-

Super Alkaline

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Energizer	Other
13A	34.2	61.5	1.5	LR20	LR20	E95	D
14A	26.2	50.0	1.5	LR14	LR14	E93	C
15A	14.5	50.5	1.5	LR6	LR6	E91	AA
24A	10.5	44.5	1.5	LR03	LR03	E92	AAA
25A	8.3	42.5	1.5	LR8D425	-	E96	AAAA
312A	62.0(L) x 22.0(W) x 67.0(H)		4.5	3LR12	-	-	-
908A	66.0(L) x 66.0(W) x 111.0(H)		6.0	4LR25	4LR25X	528	-
910A	12.0	30.2	1.5	LR1	LR1	-	N
1604A	26.5(L) x 17.5(W) x 48.5(H)		9.0	6LF22	6LF22	522	-
1412AP	35.5(L) x 9.2(W) x 48.4(H)		6.0	-	-	539	J

Greencell Extra Heavy Duty

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Eveready	Other
* 13G	34.2	61.5	1.5	R20P	R20P	1250	D
* 14G	26.2	50.0	1.5	R14P	R14P	1235	C
* 15G	14.5	50.5	1.5	R6P	R6P	1215	AA
* 24G	10.5	44.5	1.5	R03	R03	1212	AAA
312G	62.0(L) x 22.0(W) x 67.0(H)		4.5	3R12	-	-	-
908G	66.0(L) x 66.0(W) x 111.0(H)		6.0	4R25	4F	509	-
* 1604G	26.5(L) x 17.5(W) x 48.5(H)		9.0	6F22	6F22	1222	-

* Lead Free Version

Supercell Super Heavy Duty

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Eveready	Other
13S	34.2	61.5	1.5	R20S	R20S	1050	D
14S	26.2	50.0	1.5	R14S	R14S	1035	C
15S	14.5	50.5	1.5	R6S	R6S	1015	AA
24S	10.5	44.5	1.5	R03	R03	912	AAA
312S	62.0(L) x 22.0(W) x 67.0(H)		4.5	3R12	3R12	1289/AD28	210
1603S	66.0(L) x 52.0(W) x 81.0(H)		9.0	6F100	6F100	276	-
1604S	26.5(L) x 17.5(W) x 48.5(H)		9.0	6F22	6F22	216	-

Powercell Heavy Duty

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Eveready	Other
13E	34.2	61.5	1.5	R20S	R20S	1050	D
14E	26.2	50.0	1.5	R14S	R14S	1035	C
15E	14.5	50.5	1.5	R6S	R6S	1015	AA
24E	10.5	44.5	1.5	R03	R03	912	AAA
1604E	26.5(L) x 17.5(W) x 48.5(H)		9.0	6F22	6F22	1222	-

Lithium 9V

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	ANSI	Ultralife
CR-V9	26.5(L) x 17.5(W) x 48.5(H)		9.0	-	-	1604LC	U9VL

Lithium Cylindrical

Model No.	Dimension (mm)		Voltage (V)	Cross Reference			
	Diameter	Height		IEC	JIS	Eveready	Duracell
CR14250	14.5	25.0	3.0	-	-	-	-
CR2	15.6	27.0	3.0	-	-	-	DLCR2
CR123A	16.8	34.5	3.0	CR17345	-	EL123AP	DL123A
CR-P2	34.8(L) x 19.5(W) x 35.8(H)		6.0	CR-P2	-	EL223AP	DL223A
2CR5	34.0(L) x 17.0(W) x 45.0(H)		6.0	2CR5	-	EL2CR5BP	DL245
15LF	14.5	50.5	1.5	FR6	FR6	-	LF1500

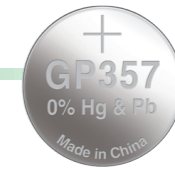
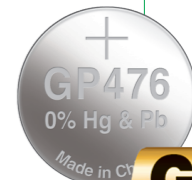
*Each cell has installed a PTC safety device to prevent overheating and excessive discharge current.
*Consult GP for battery usage at temperatures exceeding -20°C to +60°C.

Major Applications

Digital cameras,
mobile tools, motor toys,
high drain appliances.



Primary Batteries



Button Type

Major Applications

Calculators, electronic toys, hearing aids, lighters, photos and watches.

Silver Oxide (Mercury Free "F" Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	Sony
357F	11.6	5.4	1.55	165	SR44	357	V357	D357	SR44SW
364F	6.8	2.15	1.55	18	SR60	364	V364	D364	-
377F	6.8	2.6	1.55	25	SR66	377	V377	D377	SR626SW
386F	11.6	4.2	1.55	120	SR43	386	V386	D386	SR43SW
389F	11.6	3.05	1.55	70	SR54	389	V389	-	SR1130SW
392F	7.9	3.6	1.55	42	SR41	392	V392	D392	SR41SW

Silver Oxide (Mercury Free "E" Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	Sony
357E	11.6	5.4	1.55	140	SR44	357	V357	D357	SR44SW
364E	6.8	2.15	1.55	14	SR60	364	V364	D364	-
377E	6.8	2.6	1.55	20	SR66	377	V377	D377	SR626SW
386E	11.6	4.2	1.55	95	SR43	386	V386	D386	SR43SW
389E	11.6	3.05	1.55	58	SR54	389	V389	-	SR1130SW
392E	7.9	3.6	1.55	33	SR41	392	V392	D392	SR41SW

Silver Oxide (Mercury Free "S" Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	Sony
357S	11.6	5.4	1.55	130	SR44	357	V357	D357	SR44SW
364S	6.8	2.15	1.55	10	SR60	364	V364	D364	-
377S	6.8	2.6	1.55	12	SR66	377	V377	D377	SR626SW
386S	11.6	4.2	1.55	80	SR43	386	V386	D386	SR43SW
389S	11.6	3.05	1.55	55	SR54	389	V389	-	SR1130SW
392S	7.9	3.6	1.55	30	SR41	392	V392	D392	SR41SW

High Voltage Silver Oxide (Mercury Free "F" Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	
476F	13.0	25.2	6.0	155	4SR44	-	V28PX	PX28	

High Voltage Silver Oxide (Mercury Free "E" Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	
476E	13.0	25.2	6.0	130	4SR44	-	V28PX	PX28	

Lithium Coin

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	
CR1/3N	11.6	10.8	3.0	160	CR1/3N	-	-	DL1/3N	
CR1216	12.5	1.6	3.0	25	CR1216	ECR1216	CR1216	-	
CR1220	12.5	2.0	3.0	36	CR1220	ECR1220	CR1220	-	
CR1616	16.0	1.6	3.0	55	CR1616	ECR1616	CR1616	-	
CR1620	16.0	2.0	3.0	78	CR1620	ECR1620	CR1620	-	
CR2016	20.0	1.6	3.0	90	CR2016	ECR2016	CR2016	DL2016	
CR2025	20.0	2.5	3.0	160	CR2025	ECR2025	CR2025	DL2025	
CR2032	20.0	3.2	3.0	220	CR2032	ECR2032	CR2032	DL2032	
CR2430	24.5	3.0	3.0	300	CR2430	ECR2430	CR2430	DL2430	
CR2450	24.5	5.0	3.0	610	CR2450	ECR2450	CR2450	-	

Major Applications

Photos and electronic toys.



Major Applications

E-Tokens, Computer memory back-ups, photos, remote controls and watches.

Alkaline Cells (Mercury Free Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC	JIS	Eveready	Varta	Duracell
164	6.8	2.15	1.5	7	LR60	-	-	-	LR620
A76	11.6	5.4	1.5	110	LR44	LR44	A76	V13GA	LR44
177	6.8	2.6	1.5	12	LR626	LR626	-	-	-
186	11.6	4.2	1.5	70	LR43	LR43	186	V12GA	LR43
189	11.6	3.05	1.5	44	LR54	LR1130	189	V10GA	LR54
191	11.6	2.05	1.5	23	LR55	LR55	191	V8GA	-
192	7.9	3.6	1.5	24	LR41	LR41	192	V3GA	-
PX625A	15.6	5.95	1.5	190	LR9	LR9	-	V625U	PX625A

High Voltage Alkaline (Standard Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC	JIS	Eveready	Varta	Duracell
10A	10.22	22.1	9.0	38	-	-	-	-	-
11A	10.22	16.5	6.0	38	-	-	-	-	-
23AE	10.22	28.5	12.0	55	-	-	A23	V23GA	MN21
26A	8.0	15.7	6.0	20	-	-	-	-	-
27A	8.0	28.2	12.0	20	-	-	-	-	-
29A	8.0	21.9	9.0	20	-	-	-	-	-

High Voltage Alkaline (Mercury Free Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC	JIS	Eveready	Varta	Duracell
10AF	10.22	22.1	9.0	38	-	-	-	-	-
11AF	10.22	16.5	6.0	38	-	-	-	-	-
23AF	10.22	28.5	12.0	46	-	-	A23	V23GA	MN21
26AF	8.0	15.7	6.0	18	-	-	-	-	-
27AF	8.0	28.2	12.0	18	-	-	-	-	-
29AF	8.0	21.9	9.0	18	-	-	-	-	-
476AF	13	25.2	6.0	105	4LR44	4LR44	A544	V4034PX	PX28A

Hearing Aid Zinc Air (Mercury Free Series)

Model No.	Dimension (mm)		Voltage (V)	Nominal Capacity (mAh)	Cross Reference				
	Diameter	Height			IEC/JIS	Eveready	Varta	Duracell	
ZA10	5.8	3.6	1.4	90	PR536	AC10	-	DA230	
ZA13	7.9	5.4	1.4	290	PR48	AC13	V13A	DA13	
ZA312	7.9	3.6	1.4	170	PR41	AC312	V312A	DA312	
ZA675	11.6	5.4	1.4	620	PR44	AC675	V675HPA	DA675	

Major Applications

Calculators, electronic toys, melody cards, photos, remote controls and watches.

Major Applications

Electronic toys, electronic instruments, lighters, photos and remote controls.

Major Applications

Hearing aids and accessories.

Rechargeable Batteries



Specifications

Industrial Series - Cylindrical Type

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type		
			Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)				
Standard Series													
AAAA	5/4 AAAA	GP50AAAAH**	1.2	500	520	8.6	52.6	9.5	50	16	500	L30	
AAA	1/3 AAA	GP17AAA	1.2	170	180	10.4	14.1	4.2	17	16	170	L30	
AAA		GP42AAAHS	1.2	440	460	10.5	43.7	10.5	44	16	440	L80	
AAA		GP50AAA	1.2	500	520	10.5	43.7	10.5	50	16	500	L30	
AAA		GP50AAAH**	1.2	500	520	10.5	44.5	12	50	16	500	L30	
AAA		GP55AAAH**	1.2	550	580	10.5	43.7	13	55	16	550	L30	
AAA		GP60AAAH**	1.2	600	630	10.5	43.7	13	60	16	600	L30	
AAA		GP65AAAH**	1.2	650	680	10.5	43.7	13	65	16	650	L30	
AAA		GP70AAAH**	1.2	700	730	10.5	43.7	13	75	16	750	L30	
AAA		GP75AAAH**	1.2	750	780	10.5	43.7	13	75	16	750	L30	
AAA		GP80AAAH	1.2	800	830	10.5	43.7	13	80	16	800	L30	
AAA		GP95AAAH	1.2	900	920	10.5	43.7	15.2	90	16	900	L30	
AAAL		GP85AAALH	1.2	850	880	10.5	50	14.5	85	16	850	L30	
AAAL		GP91AAALH	1.2	910	930	10.5	50	15.1	91	16	910	L30	
AA	AA	GP60AAM**	1.2	600	620	14.4	48.2	15.5	60	16	600	L80	
	AA	GP60AAMD	1.2	600	620	14.4	48.2	15.5	60	16	600	L80	
	AA	GP70AAMD	1.2	700	730	14.4	48.2	17	60	16	700	L80	
	AA	GP80AAM**	1.2	800	830	14.4	48.2	18	80	16	800	L30	
	AA	GP90AAMD	1.2	900	930	14.4	48.2	20	100	16	1000	L80	
	AA	GP125AAM**	1.2	1250	1300	14.4	48.2	24	125	16	1250	L30	
	AA	GP130AAM**	1.2	1300	1350	14.4	48.2	25	130	16	1300	L80	
	AA	GP135AAMD	1.2	1350	1400	14.4	48.2	22.8	135	16	1350	L80	
	AA	GP150AAM**	1.2	1500	1550	14.4	48.2	26	150	16	1500	L30	
	AA	GP160AAMD	1.2	1600	1650	14.5	48.2	27	160	16	1600	L80	
	AA	GP160AAH**	1.2	1600	1650	14.5	49.2	26	160	16	1600	L30	
	AA	GP170AAH**	1.2	1700	1750	14.5	49.2	27	170	16	1700	L30	
	AA	GP180AAH**	1.2	1800	1850	14.5	49.2	28	180	16	1800	L30	
	AA	GP200AAH	1.2	2000	2050	14.5	49.2	29.5	200	16	2000	L80	
	AA	GP210AAH	1.2	2100	2150	14.5	49.2	29.5	210	16	2100	L80	
	AA	GP220AAH	1.2	2200	2250	14.5	49.2	29.5	220	16	2200	L80	
	4/5AA		GP121AAH	1.2	1200	1250	14.5	42.5	22	120	16	1200	L30
	4/5AA		GP135AAH	1.2	1350	1400	14.5	42.5	22.8	135	16	1350	L30
	2/3AA		GP30AAH	1.2	300	320	14.5	28.7	10.5	30	16	300	L30
	2/3AA		GP60AAH	1.2	600	620	14.5	28.7	14	60	16	600	L30
2/3AA		GP75AAH	1.2	750	770	14.5	28.7	15	75	16	750	L30	
1/3AA		GP25AAH	1.2	250	270	14.5	16.7	8	25	16	250	L30	
AF	1/3 AF	GP45AFH	1.2	450	500	17	16.3	10	45	16	450	L30	
	2/3 AF	GP110AFH	1.2	1100	1133	17	28.5	21	110	16	1100	L30	
	4/5 AF	GP181AFH	1.2	1800	1860	17	43	32	180	16	1800	L30	
	4/5 AF	GP211AFH**	1.2	2100	2160	17	43	33	210	16	2100	L30	
	AF	GP230AFH	1.2	2300	2350	17	50	36	230	16	2300	L30	
	AF	GP250AFH**	1.2	2500	2550	17	50	39	250	16	2500	L30	
	AF	GP270AFH	1.2	2600	2700	17	50	39.5	270	16	2700	L30	
	7/5 AF	GP380AFH**	1.2	3800	3820	17	67	53.5	380	16	3800	L30	
C	C	GP350CH	1.2	3500	3850	25.8	50	78.5	350	16	3500	L50	
	C	GP1000CH	1.2	10000	10250	25.8	86	169	1000	16	10000	L50	
D	D	GP450DH	1.2	4500	4500	34.2	60	130	450	16	4500	L50	
	D	GP700DH**	1.2	7000	7000	33	60	155	700	16	7000	L50	
	D	GP900DH**	1.2	9000	9225	33	60	170	900	16	9000	L50	
	D	GP1000DH	1.2	10000	10250	33	60	175	1000	16	10000	L50	
	D	GP1100DH	1.2	11000	11550	33	60	179	1100	16	11000	L50	
F	F	GP1300FH	1.2	13000	13650	33	90	140	1300	16	13000	L50	
LA	18670	GP380LAHV	1.2	3800	3990	18.3	67	60	380	16	3800	L50	
	18650	GP410LAH**	1.2	4100	4220	18.3	65.5	58	410	16	4100	L30	
	18670	GP450LAH**	1.2	4300	4500	18.3	67	63	430	16	4300	L30	

Ambient temperature range : Standard charge : 0 to 45°C , Fast charge : 10 to 45°C , Discharge : -20 to 50°C , Storage : -20 to 35°C
One hour rate with charge termination control. * After charging at 0.1C for 16 hours. ** With UL approval.

Definition of LSD type :

L80 : Fully charged, then store at 20degC for 1 year, 80% of minimum capacity can be retained.
L50 : Fully charged, then store at 20degC for 1 year, 50% of minimum capacity can be retained.
L30 : Fully charged, then store at 20degC for 1 year, 30% of minimum capacity can be retained.

Major Applications

Cordless Phones, Baby Monitors, Transceivers, Portable facimile machines, Portable Scanners, Portable Printers, Portable Video / Audio devices, Photographic devices, Personal Care devices, Torches, Remote Controllers...

Industrial Series - Cylindrical Type

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type	
			Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)			
High Drain Series												
AA	AA	GP130AAHE	1.2	1300	1350	14.5	49.2	26	130	16	1300	L80
Sub-C	Sub-C	GP130SCHSV	1.2	1300	1350	23	43	31	130	16	1300	L50
	Sub-C	GP140SCHSV	1.2	1400	1480	23	43	35	140	16	1400	L50
	Sub-C	GP150SCHSV	1.2	1500	1580	23	43	36.5	150	16	1500	L50
	Sub-C	GP160SCHE	1.2	1600	1680	23	43	38	160	16	1600	L50
	Sub-C	GP180SCHSV	1.2	1800	1850	22.7	43	43	180	16	1800	L50
	Sub-C	GP220SCHSV	1.2	2200	2300	23	43	48	220	16	2200	L50
	Sub-C	GP220SCH**	1.2	2200	2310	23	43	55	220	16	2200	L50
	Sub-C	GP260SCHSV	1.2	2600	2650	23	43	52	260	16	2600	L50
	Sub-C	GP260SCHD**	1.2	2600	2730	23	43	56	260	16	2600	L50
	Sub-C	GP300SCHSV	1.2	3000	3100	23	43	56	300	16	3000	L50
	Sub-C	GP300SCH	1.2	3000	3100	23	43	56	300	16	3000	L50
Sub-C	GP330SCH	1.2	3300	3430	23	43	62	330	16	3300	L50	
D	D	GP700DH**	1.2	7000	7350	33	60	155	700	16	7000	L50
	D	GP900DH**	1.2	9000	9225	33	60	170	900	16	Not Applicable	L50
	D	GP1000DH	1.2	10000	10250	33	60	175	1000	16	Not Applicable	L50
	D	GP1100DH	1.2	11000	11550	33	60	179	1100	16	Not Applicable	L50

Ambient temperature range : Standard charge : 0 to 45°C , Fast charge : 10 to 45°C , Discharge : -20 to 50°C , Storage : -20 to 35°C
One hour rate with charge termination control. * After charging at 0.1C for 16 hours. ** With UL approval.

Major Applications

Vacuum Cleaners, Home Appliances, Gardening Tools, eBikes...

Industrial Series - Cylindrical Type

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type	
			Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)			
High temperature Series												
AAA	AAA	GP60AAAHT	1.2	600	630	10.5	43.7	14	60	16	Not Applicable	L50
AA	AA	GP110AALHT	1.2	1100	1155	14.5	50.5	23.5	110	16	Not Applicable	L80
	AA	GP125AAMT**	1.2	1250	1280	14.4	48.2	24	125	16	Not Applicable	L80
AF	4/5 AF	GP160AFHT	1.2	1600	1680	17	43	33	160	16	Not Applicable	L80
	AF	GP210AFHT	1.2	2100	2200	17	50	38	210	16	Not Applicable	L80
18700	18700	GP400LAHT	1.2	4000	4120	18.3	70	67	400	16	Not Applicable	L80
	18900	GP400LALHT	1.2	4000	4120	18.3	90	76	400	16	Not Applicable	L80
	Sub-C	160SCHT	1.2	1600	1680	23	43	43	160	16	Not Applicable	L80
Sub-C	Sub-C	GP220SCHT**	1.2	2200	2310	23	43	53	220	16	Not Applicable	L80
	Sub-C	GP220SCHTD	1.2	2200	2310	23	43	53.5	220	16	Not Applicable	L80
D	D	GP450DHT	1.2	4500	4725	33	60.5	115.5	450	16	Not Applicable	L80
	D	GP700DHT**	1.2	7000	7350	33	60.5	146	700	16	Not Applicable	L80

Ambient temperature range : Standard charge : 0 to 50°C , Discharge : -20 to 70°C , Storage : -20 to 35°C , Storage (1 week) : -20 to 60°C
One hour rate with charge termination control. * After charging at 0.1C for 16 hours. ** With UL approval.

Definition of LSD type :

L80 : Fully charged, then store at 20degC for 1 year, 80% of minimum capacity can be retained.
L50 : Fully charged, then store at 20degC for 1 year, 50% of minimum capacity can be retained.
L30 : Fully charged, then store at 20degC for 1 year, 30% of minimum capacity can be retained.

Major Applications

Emergency Lightings, Energy Storage Devices/UPS, Solar Curtains, Solar Device Storages...etc.

Rechargeable B Batteries

Specifications

Industrial Series - 9 Volt Type

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type
			Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)		
9V Series											
9V	GP17R8H**	8.4	170	175	15.7(T) x 26.5(W) x 48.5(H)		32	17	16	170	L30
9V	GP17R9H**	9.6	170	175	15.7(T) x 26.5(W) x 48.5(H)		36	17	16	170	L30
9V	GP20R7H	7.2	200	210	15.7(T) x 26.5(W) x 48.5(H)		36.5	20	16	200	L30
9V	GP20R8H	8.4	200	210	15.7(T) x 26.5(W) x 48.5(H)		42.5	20	16	200	L30

Ambient temperature range : Standard charge : 0 to 45°C, Fast charge : 10 to 45°C, Discharge : -20 to 50°C, Storage : -20 to 35°C
 # One hour rate with charge termination control. * After charging at 0.1C for 16 hours. ** With UL approval.

Major Applications

Karaoke Microphones, Toys, Meters, Industrial equipments...

Industrial Series - Prismatic Type

Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)	Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type
		Minimum	Typical			Current (mA)	Time (hour)		
GP5M70	1.2	610	630	6.1(T) x 17.0(W) x 35.3(H)	11	61	16	610	L30

Ambient temperature range : Standard charge: 0 to 45°C, Fast charge : 10 to 45°C, Discharge : -20 to 50°C, Storage : -20 to 35°C
 # One hour rate with charge termination control. * After charging at 0.1C for 16 hours.

Major Applications

Cordless Phones, Walkie-Talkies...

Industrial Series - Button Type

Model No.	Nominal Capacity at 5-hr rate (mAh)	Nominal Dimension (mm)		Weight (g)	Standard Charge			Nominal Voltage (V)	End Voltage (V)	LSD type
		Diameter	Height		Current (mA)	Time (hour)	Maximum Charging Voltage (V)			
High Capacity Series										
GP40BVH ^{2**}	40	11.7	5.5	2.0	4	16	1.5	1.2	1.0	L30
GP80BVH ^{1**}	80	15.6	6.4	4.0	8	16	1.5	1.2	1.0	L30
GP250BVH ¹	250	25.2	6.4	12.0	25	16	1.5	1.2	1.0	L30
GP320BVH ¹	320	25.2	8.7	14.1	32	16	1.5	1.2	1.0	L30
Standard Series										
GP60BVH ¹	60	15.6+0/-0.3	6.4+0/-0.6	3.6	6	16	1.5	1.2	1.0	L30
GP280BVH ¹	280	25.2+0/-0.3	8.7+0/-0.6	12.6	28	16	1.5	1.2	1.0	L30

Ambient temperature range : ¹ Standard charge: 0 to 45°C, Discharge : 0 to 45°C, Storage : -20°C to 45°C
² Standard charge : 0 to 65°C, Discharge : -20 to 65°C, Storage : -40 to 65°C

** With UL approval.

Major Applications

Cordless Phones, Instruments backups...

Definition of LSD type :

L80 : Fully charged, then store at 20degC for 1 year, 80% of minimum capacity can be retained.
 L50 : Fully charged, then store at 20degC for 1 year, 50% of minimum capacity can be retained.
 L30 : Fully charged, then store at 20degC for 1 year, 30% of minimum capacity can be retained.

Specifications

Consumer Series

Cell Size	Model No.	Nominal Voltage (V)	Capacity (0.2C discharge)*(mAh)		Nominal Dimension (mm)		Weight (g)	Standard Charge		1 Hr Charge Current (mA)#	LSD type
			Minimum	Typical	Diameter	Height		Current (mA)	Time (hour)		
Standard Series											
AAA	GP65AAAHC**	1.2	650	680	10.5	44.5	13	65	16	650	L50
	GP85AAAHC	1.2	850	860	10.5	44.5	14.5	85	16	850	L50
	GP100AAAHC	1.2	930	970	10.5	44.5	15.2	95	16	950	L50
AA	GP60AAMC	1.2	600	620	14.5	50.5	15.5	60	16	600	L30
	GP130AAHC**	1.2	1300	1350	14.5	50.5	25	130	16	1300	L80
	GP160AAHC	1.2	1600	1650	14.5	50.5	26	160	16	1600	L30
	GP180AAHC**	1.2	1800	1850	14.5	50.5	28	180	16	1800	L80
	GP210AAHC**	1.2	2000	2050	14.5	50.5	28	200	16	2000	L80
	GP230AAHC	1.2	2200	2250	14.5	50.5	29.5	220	16	2200	L80
	GP250AAHC**	1.2	2450	2450	14.5	50.5	31.0	245	16	2450	L50
C	GP270AAHC**	1.2	2600	2600	14.5	50.5	31.0	260	16	2600	L50
	GP220CHC	1.2	2200	2200	26.2	50	61	220	16	Not Applicable	L50
D	GP350CHC	1.2	3500	3500	26.2	50	78.5	350	16	Not Applicable	L50
	GP220DHC	1.2	2200	2200	34.2	61.5	71	220	16	Not Applicable	L50
	GP450DHC	1.2	4500	4500	34.2	61.5	130	450	16	Not Applicable	L50
	GP700DHC	1.2	7000	7000	34.2	61.5	155	700	16	Not Applicable	L50
9V	GP900DHC	1.2	9000	9000	34.2	61.5	170	900	16	Not Applicable	L50
	GP17R8H**	8.4	170	175	15.7(T) x 26.5(W) x 48.5(H)		32	17	16	170	L30
	GP20R8H	8.4	200	210	15.7(T) x 26.5(W) x 48.5(H)		42.5	20	16	200	L30

Ambient temperature range : Standard charge : 0 to 45°C, Fast charge : 10 to 45°C,
 Discharge : -20 to 50°C, Storage : -20 to 30°C
 # One hour rate with charge termination control.
 * After charging at 0.1C for 16 hours. ** With UL approval.

Definition of LSD type :

L80 : Fully charged, then store at 20degC for 1 year, 80% of minimum capacity can be retained.
 L50 : Fully charged, then store at 20degC for 1 year, 50% of minimum capacity can be retained.
 L30 : Fully charged, then store at 20degC for 1 year, 30% of minimum capacity can be retained.

ReCyko+ Series

AAAA	GP30AAAHC	1.2	300	310	8.4	42.2	7.3	30	16	300
AAA	GP85AAAHC**	1.2	800	820	10.5	44.5	14	80	16	800
AA	GP210AAHC**	1.2	2000	2050	14.5	50.5	30	200	16	2000
C	GP260CHB	1.2	2600	2600	26.2	50	62	260	16	2600
C	GP300CHCB	1.2	3000	3000	26.2	50	70	300	16	3000
D	GP260DHB	1.2	2600	2600	34.2	61.5	72	260	16	2600
D	GP570DHCB	1.2	5700	5700	34.2	61.5	124	570	16	5700
9V	GP15R8HB	8.4	150	155	15.7(T) x 26.5(W) x 48.5(H)		32	15	16	150
Prismatic	GP5MB	1.2	550	560	6.1(T) x 17(W) x 35.3(H)		13	55	16	550

Ambient temperature range : Standard charge : 0 to 45°C, Fast charge : 10 to 45°C, Discharge : -20 to 50°C, Storage : -20 to 30°C
 # One hour rate with charge termination control. * After charging at 0.1C for 16 hours. ** With UL approval.

EkoPower Series

AAA	GP65AAAHC**	1.2	650	680	10.5	44.5	13	65	16	650
AA	GP100AAHC	1.2	1000	1050	14.5	50.5	22	100	16	1000
AA	GP130AAHC	1.2	1300	1340	14.5	50.5	25	130	16	1300

Smart energy Series

AAA	GP40AAAHC	1.2	400	420	10.5	44.5	11.5	40	16	400
AA	GP100AAHC	1.2	1000	1050	14.5	50.5	20	100	16	1000

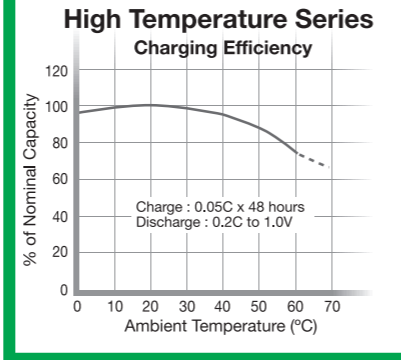
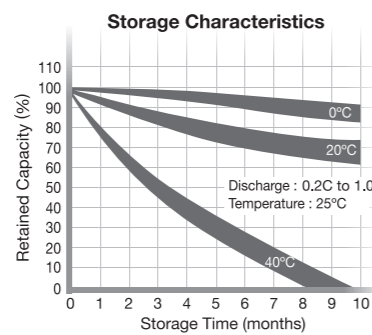
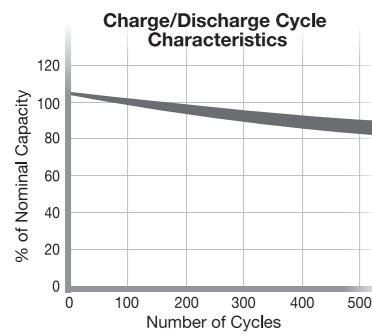
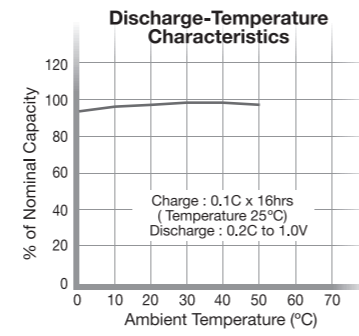
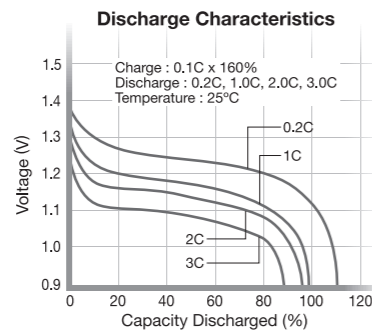
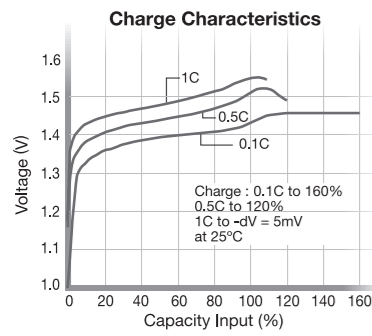
Major Applications
 Portable electronic devices, Portable video/ audio devices, Digital Cameras & Flashlights,
 Wireless Mouse & Keyboards, Toys & gaming, Cordless Phones, Remote Controllers, Torches...etc.



NiMH Rechargeable Batteries

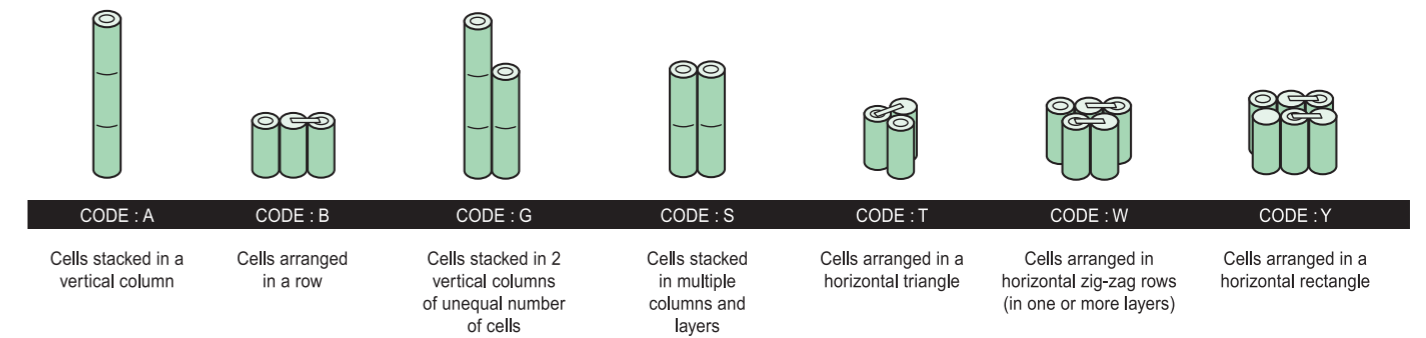
Performance Characteristics

Cylindrical Cells

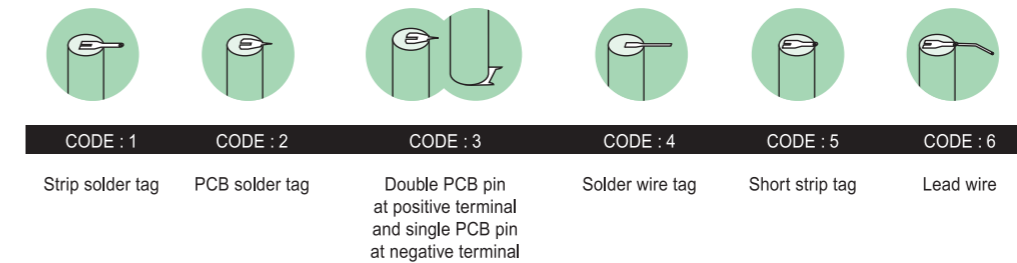


Configurations

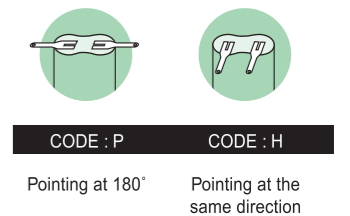
Standard Configurations for Battery Packs



Tag Type Specifications



Tag Direction Codes

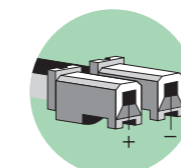


Connector Type Specifications

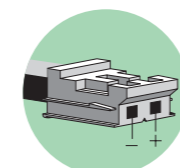
GP Universal Plug - exclusively from GP, offers distinctive features unparalleled in the market.
- U.S. patent no. 5,161,990.

Major Benefits

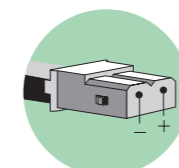
- Compatible with most cordless phone models (interchangeable with Mitsumi, JST, Molex plugs etc.)
- Minimise inventory items
- User friendly



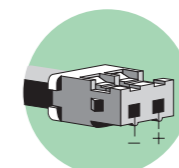
MU
Universal Plug



MJ
JST EHR-2



ML
Molex 5264-02



MS
Mitsumi M63M83-02