



GP series

- General Purpose
- Full Product Line

GP

GP series



GP series has the widest range of applications. It can be applied to fit various power requirements. This series battery is small, lightweight and can be used for more than 260 cycles at 100% discharge incycle service, or 3 to 5 years in standby service. As with all CSB batteries, all GP series batteries are rechargeable, highly efficient, maintenance free, leak proof, useable in any position and ISO certified as well as recognized by UL.



Performance

- Multi-functional
- For both cycle and standby use
- Uniform plate formation for consistent capacities
- Reduced internal resistance for superior performance
- Provides hundreds to thousands of recharge cycles (cycle life is based on temperature and depth of discharge)
- Nonspillable, useable in any position
- Maintenance free
- Low self-discharge

Service life

- 3 to 5 years expected life under normal float charge condition at 25°C (77°F)
- Extended shelf life (up to 14 months at 20°C)

Reliability

- CSB manufactured batteries are 100% 2 cycle tested by CCDS system.
- CSB-Manufactured batteries are UL-recognized components under UL 924 and UL 1989. CSB file number MH 14533.
- ISO 9001 and 14001 certified.

Applications

Standby use

- UPS power supply
- Workstation UPS
- Emergency lighting equipment
- Precision instrument backup power
- Fire alarm and security systems
- Communication and electric equipment
- Office computers, microcomputers, and OA equipment
- Robots, control equipment and other FA equipment
- Telemeter equipment
- Emergency power supply in power generation plants and substations.

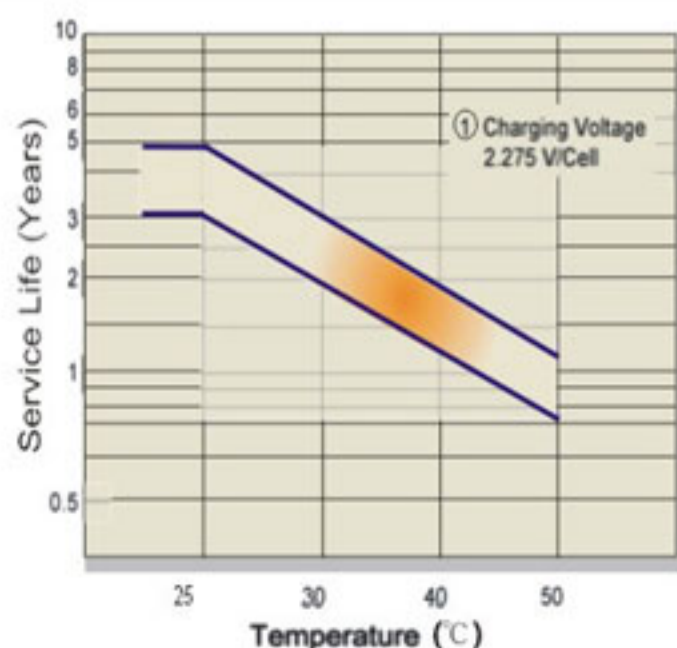
Cycle use

- Portable measuring equipment
- Camera and photographic equipment
- Various power toys and hobby equipment

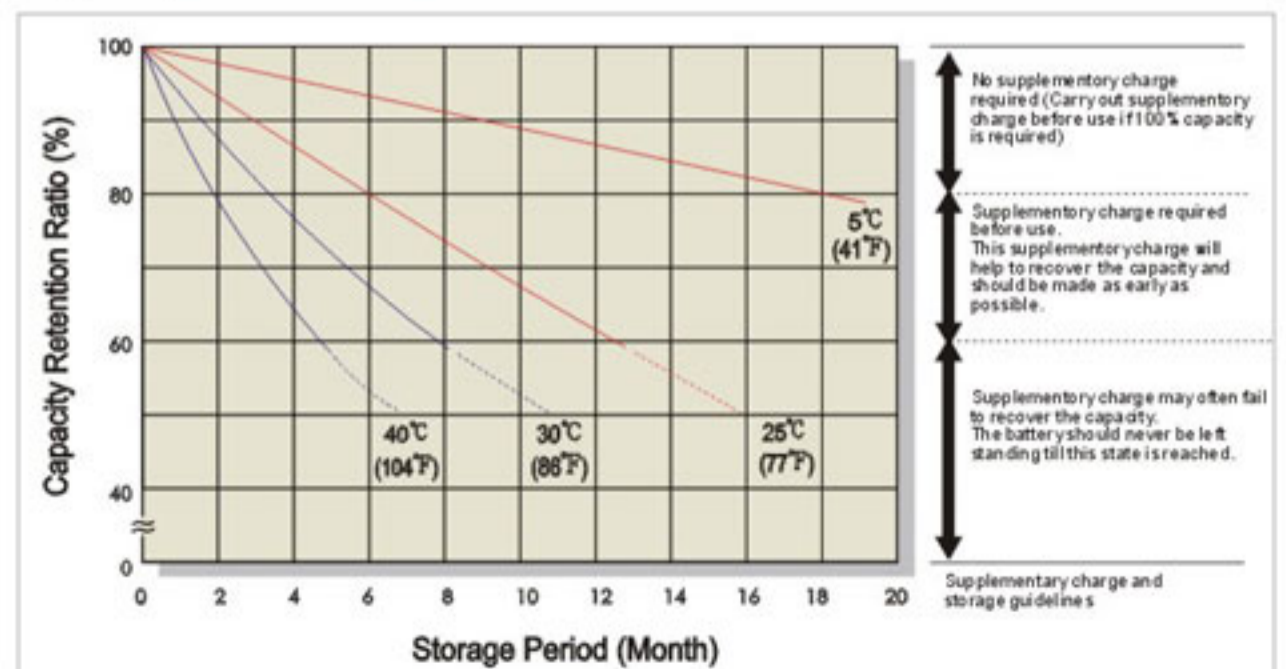
Solar Cell Power Generation

- Street lighting
- Portable power supply
- Water pumping systems
- Small town power systems

Tickle (or Float) Service Life



Capacity Retention Characteristic



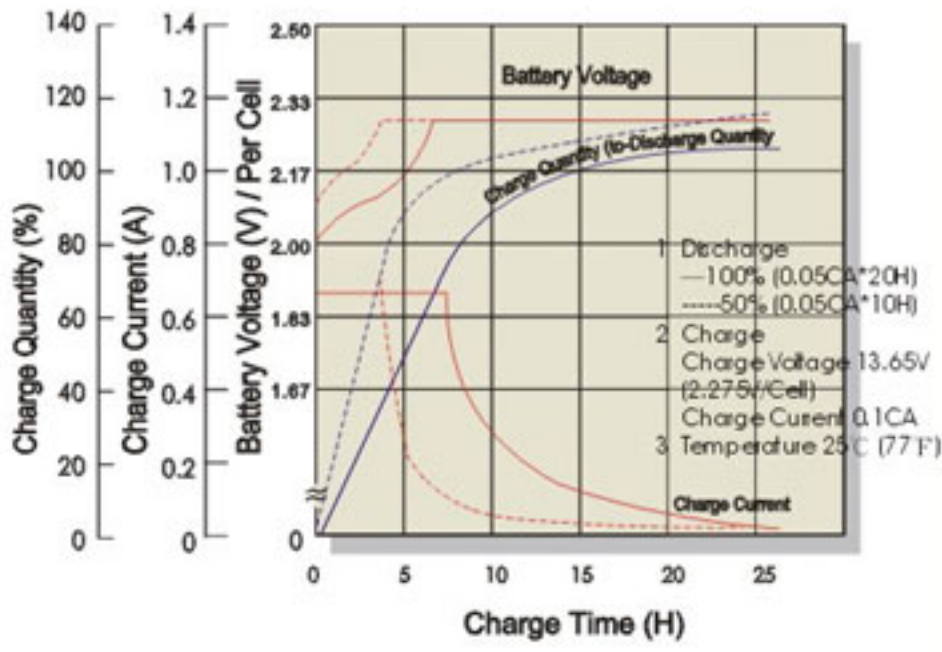
No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

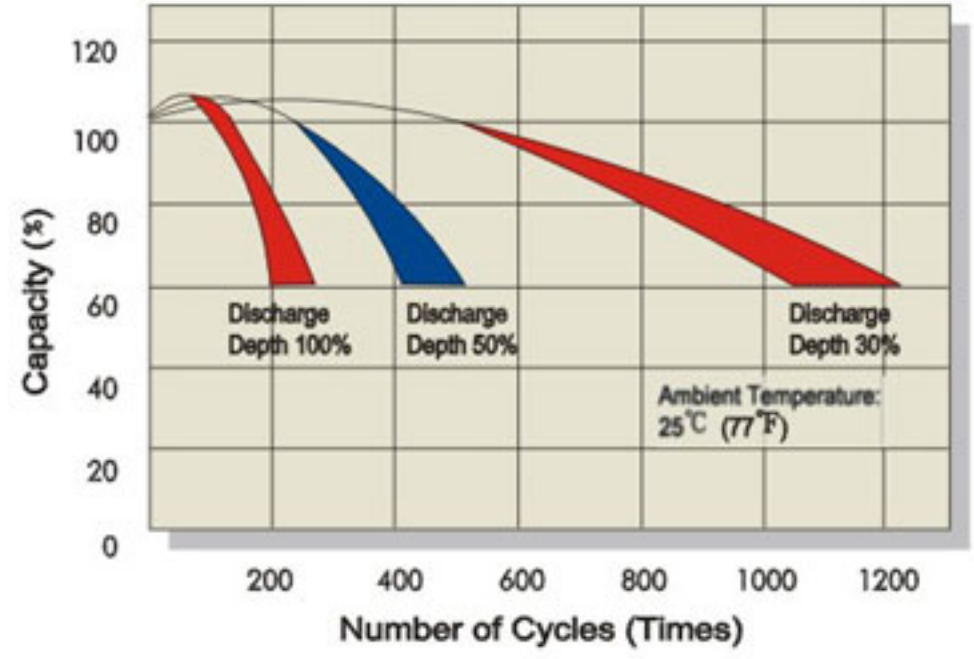
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached.

Supplementary charge and storage guidelines

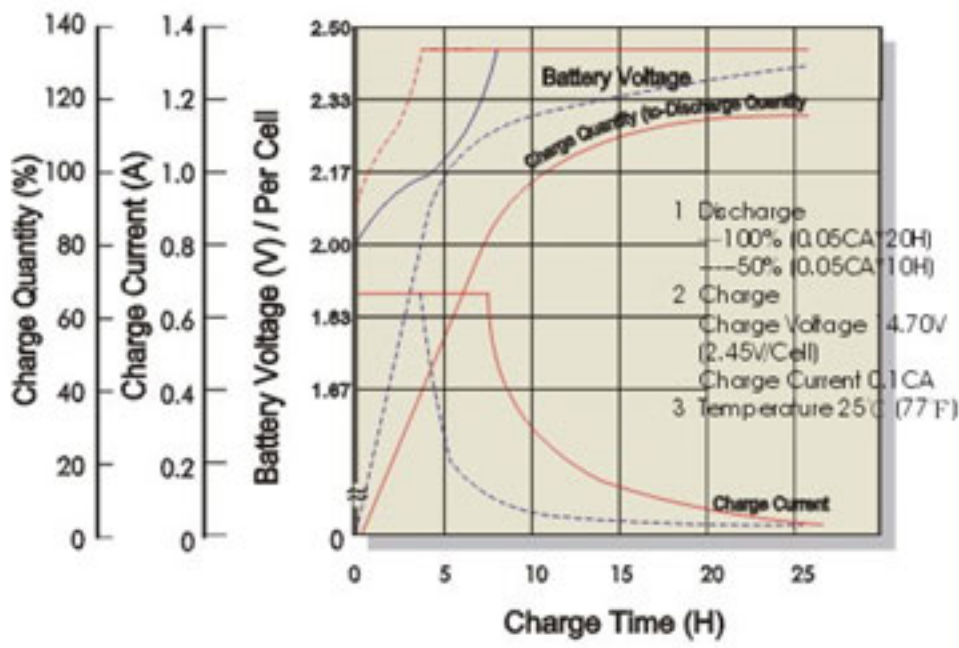
Battery Voltage and Charge Time for Standby Use



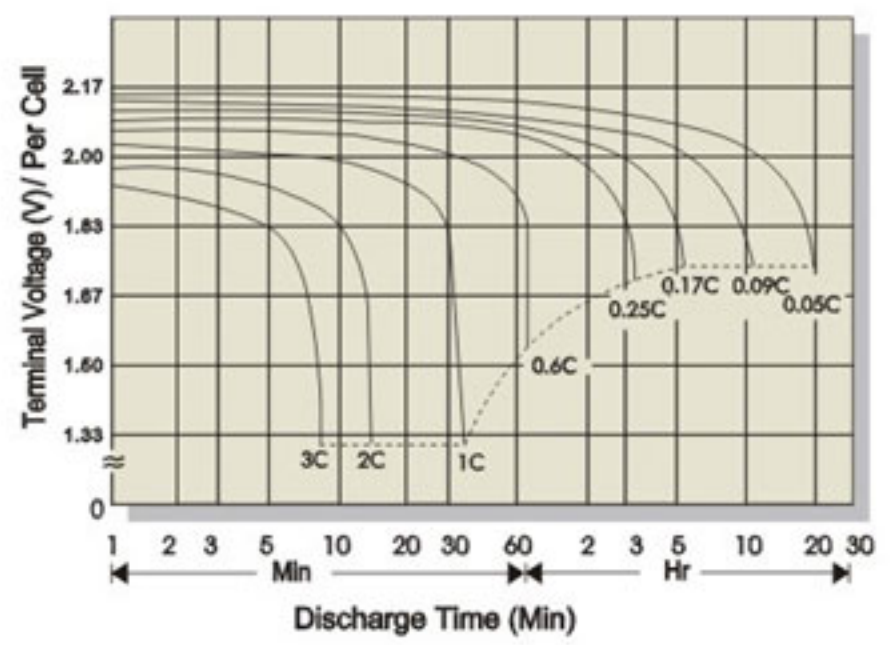
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



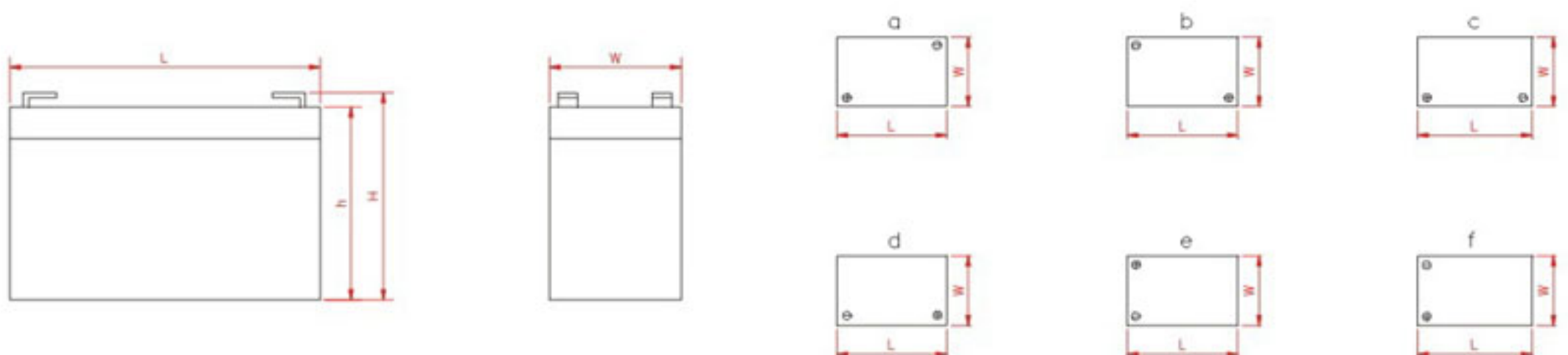
Terminal Voltage (V) and Discharge Time (25°C 77°F)



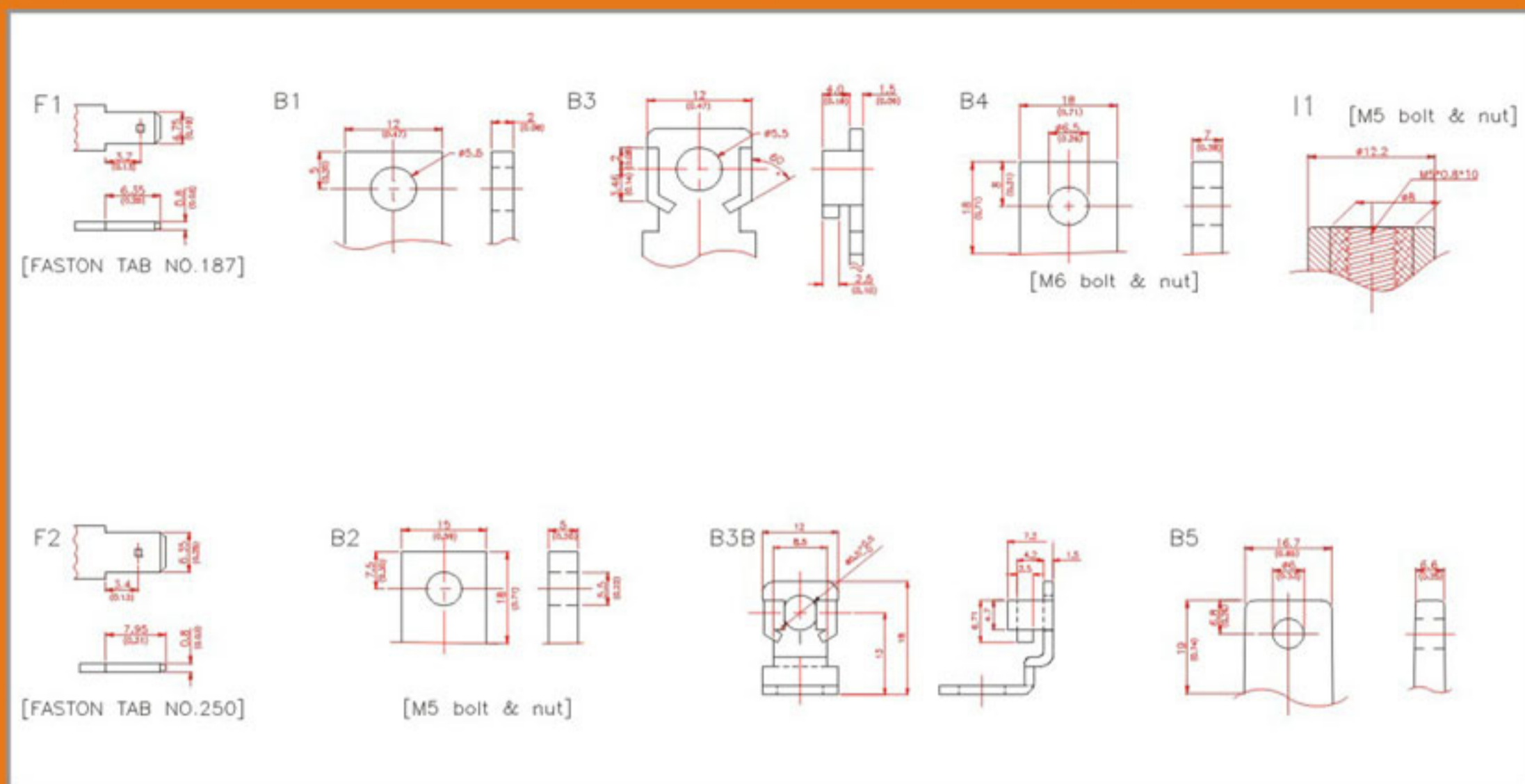
Specifications

Type	Nominal Voltage(V)	Nominal Capacity (20hr)(Ah)	Weight (Approx. kg)	Energy Density (wh/l)	Specific Energy (wh/kg)	Internal Resistance Approx. (mΩ)	Max. Discharge Current 5 sec (A)	Dimensions (mm)			Terminal Position	Terminal Type	Max. Charging Current (A)	Charging(V)		
								Height Over Terminal (h)	Container Height (h)	Length (L)				Width (W)	Standby Use	Cycle Use
GP645	6	4.5	0.84	78.8	32.10	19.00	60/90	108.0±1.5	102.0±1.5	70.0±1.0	48.0±1.0	a	F1/F2	1.35		
GP672	6	7.2	1.27	89.5	34.00	13.50	100/130	100.0±1.0	94.0±1.0	151.0±2.0	34.0±1.0	c	F1/F2	2.16		
GP6120	6	12	1.94	101.5	37.10	7.50	150/180	100.0±1.0	94.0±1.0	151.0±2.0	50.0±1.0	c	F1/F2	3.60		
GP1222	12	2.2	0.90	72.7	29.30	63.00	40	66.0±1.0	60.0±1.0	178.0±0.5	34.0±0.5	c	F1/F2	0.66		
GP1245	12	4.5	1.66	81.6	32.50	40.50	60/90	108.0±1.5	102.0±1.5	92.8±1.0	69.9±1.0	c	F1/F2	1.35		
GP1272	12	7.2	2.55	93.6	33.90	21.00	100/130	100.0±1.0	94.0±1.0	151.0±2.0	65.0±1.0	e	F1/F2	2.16	2.275V±0.025V/CELL	2.45V±0.05V/CELL
GP12120	12	12	3.84	103.2	37.50	14.00	150/180	100.0±1.0	94.0±1.0	151.0±2.0	98.0±1.0	e	F1/F2	3.60	AT 25°C (77°F)	AT 25°C (77°F)
GP12170	12	17	5.85	88.6	34.90	14.50	230	167.0±2.0	165.5±2.0	181.0±2.0	76.2±1.0	d	B1/B3	5.10	Temp Coefficient	Temp Coefficient
GP12200	12	20	6.40	104.2	37.50	13.00	230	167.0±2.0	160.0	181.0±2.0	76.2±1.0	d	I1	6.00	-3.3mV/CELL°C	-5mV/CELL°C
GP12260	12	26	9.18	88.0	34.00	9.40	350	125.0±1.5	122.0±1.5	166.0±2.0	175.0±2.0	d	B1/B3/B3B	7.80		
GP12340	12	34	11.33	103.7	36.00	8.00	380	178.3±2.0	154.8±2.0	195.6±2.0	130.0±1.5	c	B5	10.20		
GP12400	12	40	14.50	87.6	33.10	8.70	400	170.0±2.0	168.5±2.0	197.0±2.0	165.0±2.0	d	B2	12.00		
GP12650	12	65	21.50	78.0	36.30	8.00	500	174.0±2.0	172.5±2.0	349.4±2.5	166.0±2.0	d	B4	19.50		
GP121000	12	100	35.00	77.6	34.30	6.00	500	174.0±2.0	172.5±2.0	511.8±2.5	175.2±2.0	f	B4	30.00		

Terminal Position



Terminal Type



GP645

Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	18.70	12.30	9.08	5.37	3.11	1.80	1.26	0.99	0.81	0.54	0.44	0.23
1.67V	17.79	11.81	8.91	5.32	3.10	1.79	1.25	0.99	0.81	0.53	0.44	0.23
1.70V	17.40	11.60	8.83	5.30	3.09	1.79	1.25	0.98	0.81	0.53	0.44	0.23
1.75V	16.20	11.15	8.63	5.22	3.06	1.78	1.25	0.98	0.80	0.53	0.43	0.23
1.80V	15.00	10.70	8.42	5.13	3.03	1.76	1.24	0.98	0.80	0.53	0.43	0.23
1.85V	13.80	10.25	8.22	5.05	3.00	1.75	1.24	0.97	0.80	0.53	0.43	0.22

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	112.00	73.50	54.50	32.20	18.70	10.80	7.55	5.96	4.86	3.21	2.64	1.41
1.67V	107.10	70.70	53.45	31.92	18.63	10.73	7.52	5.94	4.85	3.20	2.63	1.40
1.70V	105.00	69.50	53.00	31.80	18.60	10.70	7.50	5.93	4.84	3.19	2.63	1.40
1.75V	97.50	66.75	51.75	31.30	18.40	10.65	7.48	5.91	4.83	3.18	2.61	1.38
1.80V	90.00	64.00	50.50	30.80	18.20	10.60	7.45	5.89	4.81	3.17	2.59	1.35
1.85V	82.50	61.25	49.25	30.30	18.00	10.55	7.43	5.87	4.80	3.16	2.57	1.33

GP672

Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	28.60	18.60	14.30	8.75	5.28	3.06	2.18	1.72	1.42	0.94	0.76	0.40
1.67V	26.78	17.90	13.95	8.69	5.27	3.05	2.17	1.71	1.41	0.93	0.75	0.39
1.70V	26.00	17.60	13.80	8.67	5.26	3.05	2.17	1.71	1.41	0.93	0.75	0.38
1.75V	24.25	16.80	13.30	8.55	5.24	3.04	2.16	1.71	1.41	0.93	0.74	0.37
1.80V	22.50	16.00	12.80	8.42	5.22	3.03	2.15	1.70	1.40	0.92	0.73	0.36
1.85V	20.75	15.20	12.30	8.30	5.20	3.02	2.14	1.70	1.40	0.92	0.72	0.35

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	172.00	112.00	85.50	52.50	31.70	18.40	13.10	10.30	8.52	5.62	4.55	2.37
1.67V	160.80	107.80	83.40	52.15	31.63	18.33	13.03	10.23	8.47	5.59	4.52	2.31
1.70V	156.00	106.00	82.50	52.00	31.60	18.30	13.00	10.20	8.45	5.58	4.50	2.29
1.75V	145.50	101.00	79.75	51.25	31.45	18.25	12.95	10.15	8.45	5.58	4.44	2.23
1.80V	135.00	96.00	77.00	50.50	31.30	18.20	12.90	10.10	8.44	5.57	4.38	2.16
1.85V	124.50	91.00	74.25	49.75	31.15	18.15	12.85	10.05	8.44	5.57	4.32	2.10

GP6120**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	48.20	31.40	24.10	14.80	8.83	5.12	3.66	2.89	2.33	1.53	1.23	0.63
1.67V	44.70	30.00	23.40	14.66	8.72	5.06	3.65	2.88	2.32	1.52	1.22	0.61
1.70V	43.20	29.40	23.10	14.60	8.67	5.03	3.64	2.88	2.31	1.52	1.21	0.60
1.75V	40.10	28.05	22.25	14.35	8.50	4.93	3.62	2.86	2.30	1.51	1.20	0.59
1.80V	37.00	26.70	21.40	14.10	8.33	4.83	3.60	2.84	2.28	1.50	1.18	0.57
1.85V	33.90	25.35	20.55	13.85	8.16	4.73	3.58	2.82	2.27	1.49	1.17	0.55

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	289.00	189.00	145.00	89.00	53.00	30.70	22.00	17.40	14.00	9.24	7.35	3.75
1.67V	268.00	180.60	140.80	87.95	52.30	30.35	21.93	17.33	13.93	9.19	7.28	3.68
1.70V	259.00	177.00	139.00	87.50	52.00	30.20	21.90	17.30	13.90	9.17	7.25	3.65
1.75V	240.50	168.50	134.00	86.00	51.00	29.60	21.75	17.20	13.80	9.11	7.15	3.54
1.80V	222.00	160.00	129.00	84.50	50.00	29.00	21.60	17.10	13.70	9.04	7.05	3.42
1.85V	203.50	151.50	124.00	83.00	49.00	28.40	21.45	17.00	13.60	8.98	6.95	3.31

GP1222**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	8.67	5.90	4.45	2.99	1.42	0.82	0.59	0.47	0.39	0.26	0.22	0.12
1.67V	8.17	5.63	4.35	2.74	1.36	0.79	0.57	0.45	0.37	0.25	0.21	0.11
1.70V	7.95	5.52	4.30	2.63	1.33	0.77	0.56	0.44	0.36	0.24	0.20	0.11
1.75V	6.90	4.84	3.81	2.61	1.29	0.75	0.54	0.43	0.35	0.24	0.20	0.11
1.80V	5.84	4.16	3.31	2.58	1.25	0.73	0.52	0.41	0.34	0.23	0.19	0.10
1.85V	4.79	3.48	2.82	2.56	1.21	0.71	0.50	0.40	0.33	0.23	0.19	0.10

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	104.00	70.80	53.40	35.90	17.00	9.86	7.11	5.62	4.64	3.06	2.59	1.41
1.67V	97.98	67.58	52.14	32.82	16.30	9.45	6.82	5.39	4.45	2.93	2.49	1.35
1.70V	95.40	66.20	51.60	31.50	16.00	9.28	6.69	5.29	4.37	2.88	2.44	1.32
1.75V	82.75	58.05	45.65	31.20	15.50	8.99	6.49	5.13	4.24	2.80	2.37	1.28
1.80V	70.10	49.90	39.70	30.90	15.00	8.70	6.28	4.96	4.10	2.71	2.29	1.24
1.85V	57.45	41.75	33.75	30.60	14.50	8.41	6.08	4.80	3.97	2.63	2.22	1.20

GP1245**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	18.67	12.25	9.08	5.37	3.11	1.80	1.26	0.99	0.81	0.54	0.44	0.23
1.67V	17.80	11.78	8.91	5.32	3.10	1.79	1.25	0.98	0.81	0.53	0.44	0.23
1.70V	17.42	11.58	8.83	5.30	3.09	1.79	1.25	0.98	0.81	0.53	0.44	0.23
1.75V	16.21	11.13	8.63	5.22	3.06	1.78	1.25	0.98	0.81	0.53	0.44	0.23
1.80V	15.00	10.67	8.42	5.13	3.03	1.76	1.24	0.98	0.80	0.53	0.43	0.23
1.85V	13.79	10.22	8.22	5.05	3.00	1.75	1.24	0.98	0.80	0.53	0.43	0.23

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	224.00	147.00	109.00	64.40	37.30	21.60	15.10	11.90	9.72	6.42	5.27	2.80
1.67V	213.50	141.40	106.90	63.84	37.16	21.53	15.03	11.83	9.69	6.40	5.26	2.79
1.70V	209.00	139.00	106.00	63.60	37.10	21.50	15.00	11.80	9.68	6.39	5.25	2.79
1.75V	194.50	133.50	103.50	62.55	36.75	21.30	14.95	11.75	9.65	6.37	5.21	2.75
1.80V	180.00	128.00	101.00	61.50	36.40	21.10	14.90	11.70	9.61	6.34	5.17	2.70
1.85V	165.50	122.50	98.50	60.45	36.05	20.90	14.85	11.65	9.58	6.32	5.13	2.66

GP1272**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	28.58	18.58	14.25	8.75	5.28	3.06	2.18	1.72	1.42	0.93	0.76	0.40
1.67V	26.77	17.88	13.90	8.69	5.27	3.05	2.17	1.71	1.41	0.93	0.75	0.39
1.70V	26.00	17.58	13.75	8.67	5.26	3.05	2.17	1.71	1.41	0.93	0.75	0.38
1.75V	24.25	16.79	13.29	8.55	5.24	3.03	2.16	1.71	1.41	0.93	0.74	0.37
1.80V	22.50	16.00	12.83	8.42	5.22	3.00	2.15	1.70	1.40	0.92	0.73	0.36
1.85V	20.75	15.21	12.37	8.30	5.20	2.98	2.14	1.70	1.40	0.92	0.72	0.35

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	343.00	223.00	171.00	105.00	63.40	36.60	26.20	20.70	17.00	11.20	9.10	4.74
1.67V	321.30	214.60	166.80	104.30	63.19	36.39	26.06	20.63	16.93	11.13	9.02	4.62
1.70V	312.00	211.00	165.00	104.00	63.10	36.30	26.00	20.60	16.90	11.10	8.99	4.57
1.75V	291.00	201.50	159.50	102.50	62.85	36.15	25.90	20.55	16.85	11.00	8.87	4.44
1.80V	270.00	192.00	154.00	101.00	62.60	36.00	25.80	20.50	16.80	10.90	8.75	4.31
1.85V	249.00	182.50	148.50	99.50	62.35	35.85	25.70	20.45	16.75	10.80	8.63	4.18

GP12120**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	48.17	31.42	24.08	14.83	8.83	5.12	3.66	2.89	2.33	1.53	1.23	0.63
1.67V	44.67	30.02	23.38	14.66	8.72	5.06	3.65	2.88	2.32	1.52	1.22	0.61
1.70V	43.17	29.42	23.08	14.58	8.67	5.03	3.64	2.88	2.31	1.52	1.21	0.60
1.75V	40.09	28.05	22.25	14.33	8.50	4.93	3.62	2.86	2.30	1.51	1.20	0.59
1.80V	37.00	26.67	21.42	14.08	8.33	4.83	3.60	2.84	2.28	1.50	1.18	0.57
1.85V	33.92	25.30	20.59	13.83	8.16	4.73	3.58	2.82	2.27	1.49	1.17	0.56

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	578.00	377.00	289.00	178.00	106.00	61.70	43.90	34.10	27.90	18.10	14.70	7.50
1.67V	536.00	360.20	280.60	175.90	104.60	61.56	43.76	34.03	27.76	18.03	14.56	7.30
1.70V	518.00	353.00	277.00	175.00	104.00	61.50	43.70	34.00	27.70	18.00	14.50	7.21
1.75V	481.00	336.50	267.00	172.00	102.00	61.20	43.45	33.80	27.50	17.80	14.30	7.02
1.80V	444.00	320.00	257.00	169.00	100.00	60.90	43.20	33.60	27.30	17.60	14.10	6.83
1.85V	407.00	303.50	247.00	166.00	98.00	60.60	42.95	33.40	27.10	17.40	13.90	6.64

GP12170**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	80.17	50.92	38.50	23.42	13.83	8.03	5.72	4.44	3.63	2.37	1.93	1.00
1.67V	71.25	47.48	36.75	23.07	13.77	8.03	5.71	4.43	3.62	2.36	1.90	0.96
1.70V	67.42	46.00	36.00	22.92	13.75	8.03	5.70	4.43	3.61	2.35	1.89	0.94
1.75V	60.96	43.09	34.34	22.34	13.54	7.96	5.66	4.41	3.60	2.33	1.86	0.91
1.80V	54.50	40.17	32.67	21.75	13.33	7.88	5.61	4.38	3.58	2.30	1.83	0.88
1.85V	48.04	37.26	31.01	21.17	13.12	7.81	5.57	4.36	3.57	2.28	1.80	0.85

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	890.22	582.81	448.53	281.00	166.00	96.40	68.60	53.30	43.60	28.40	23.10	12.00
1.67V	790.32	543.88	428.72	276.80	165.30	96.33	68.46	53.23	43.39	28.26	22.82	11.51
1.70V	748.14	526.70	419.40	275.00	165.00	96.30	68.40	53.20	43.30	28.20	22.70	11.30
1.75V	677.10	493.50	399.60	268.00	162.50	95.45	67.85	52.90	43.15	27.90	22.35	10.90
1.80V	604.95	460.29	380.96	261.00	160.00	94.60	67.30	52.60	43.00	27.60	22.00	10.50
1.85V	532.80	427.09	361.15	254.00	157.50	93.75	66.75	52.30	42.85	27.30	21.65	10.10

GP12200**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	87.50	55.50	42.25	25.50	15.08	8.75	6.23	4.92	3.97	2.62	2.10	1.09
1.67V	77.70	51.77	40.09	25.09	15.02	8.69	6.22	4.91	3.94	2.61	2.08	1.05
1.70V	73.50	50.17	39.17	24.92	15.00	8.67	6.22	4.91	3.93	2.60	2.07	1.03
1.75V	66.42	46.96	37.13	24.34	14.75	8.55	6.17	4.87	3.92	2.59	2.04	1.00
1.80V	59.33	43.75	35.08	23.75	14.50	8.42	6.12	4.83	3.91	2.58	2.00	0.96
1.85V	52.25	40.54	33.04	23.17	14.25	8.30	6.07	4.79	3.90	2.57	1.97	0.93

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1050.00	666.00	507.00	306.00	181.00	105.00	74.70	59.00	47.60	31.40	25.20	13.10
1.67V	932.40	621.20	481.10	301.10	180.30	104.30	74.63	58.93	47.32	31.26	24.92	12.54
1.70V	882.00	602.00	470.00	299.00	180.00	104.00	74.60	58.90	47.20	31.20	24.80	12.30
1.75V	797.00	563.50	445.50	292.00	177.00	102.50	74.00	58.45	47.05	31.10	24.40	11.90
1.80V	712.00	525.00	421.00	285.00	174.00	101.00	73.40	58.00	46.90	31.00	24.00	11.50
1.85V	627.00	486.50	396.50	278.00	171.00	99.50	72.80	57.55	46.75	30.90	23.60	11.10

GP12260**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	105.83	69.00	52.83	32.67	19.58	11.50	8.14	6.37	5.24	3.46	2.82	1.47
1.67V	99.42	66.38	51.43	32.32	19.52	11.44	8.13	6.36	5.23	3.43	2.79	1.43
1.70V	96.67	65.25	50.83	32.17	19.50	11.42	8.13	6.36	5.23	3.42	2.78	1.41
1.75V	90.00	62.34	49.17	31.63	19.42	11.38	8.13	6.35	5.21	3.39	2.74	1.37
1.80V	83.33	59.42	47.50	31.08	19.33	11.33	8.12	6.33	5.19	3.35	2.70	1.33
1.85V	76.66	56.51	45.84	30.54	19.25	11.29	8.12	6.32	5.17	3.32	2.66	1.29

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1,270.00	828.00	634.00	392.00	235.00	138.00	97.70	76.40	62.90	41.50	33.80	17.60
1.67V	1,193.00	796.50	617.20	387.80	234.30	137.30	97.56	76.33	62.83	41.15	33.45	17.11
1.70V	1,160.00	783.00	610.00	386.00	234.00	137.00	97.50	76.30	62.80	41.00	33.30	16.90
1.75V	1,080.00	748.00	590.00	379.50	233.00	136.50	97.45	76.15	62.55	40.60	32.85	16.45
1.80V	1,000.00	713.00	570.00	373.00	232.00	136.00	97.40	76.00	62.30	40.20	32.40	16.00
1.85V	920.00	678.00	550.00	366.50	231.00	135.50	97.35	75.85	62.05	39.80	31.95	15.55

GP12340**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	144.33	91.67	69.33	42.08	25.00	14.50	10.28	8.00	6.55	4.26	3.48	1.80
1.67V	128.23	85.48	66.18	41.44	24.88	14.44	10.27	7.99	6.51	4.24	3.43	1.72
1.70V	121.33	82.83	64.83	41.17	24.83	14.42	10.26	7.98	6.49	4.23	3.41	1.69
1.75V	109.67	77.54	61.79	40.17	24.42	14.30	10.18	7.94	6.47	4.19	3.36	1.64
1.80V	98.00	72.25	58.75	39.17	24.00	14.17	10.10	7.89	6.45	4.14	3.30	1.58
1.85V	86.34	66.96	55.71	38.17	23.59	14.05	10.02	7.85	6.43	4.10	3.25	1.53

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1,732.00	1,100.00	832.00	505.00	300.00	174.00	124.00	96.00	78.60	51.10	41.70	21.60
1.67V	1,538.80	1,025.80	794.20	497.30	298.60	173.30	123.37	95.79	78.11	50.82	41.14	20.69
1.70V	1,456.00	994.00	778.00	494.00	298.00	173.00	123.10	95.70	77.90	50.70	40.90	20.30
1.75V	1,316.00	930.50	741.50	482.00	293.00	171.50	122.15	95.20	77.65	50.15	40.25	19.60
1.80V	1,176.00	867.00	705.00	470.00	288.00	170.00	121.20	94.70	77.40	49.60	39.60	18.90
1.85V	1,036.00	803.50	668.50	458.00	283.00	168.50	120.25	94.20	77.15	49.05	38.95	18.20

GP12400**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	175.83	112.50	85.00	51.83	30.58	17.67	12.58	9.83	8.01	5.25	4.28	2.21
1.67V	157.17	104.92	81.03	50.78	30.52	17.61	12.52	9.77	8.00	5.19	4.20	2.12
1.70V	149.17	101.67	79.33	50.33	30.50	17.58	12.50	9.75	8.00	5.17	4.17	2.08
1.75V	135.00	95.00	75.50	48.96	30.13	17.54	12.46	9.71	7.95	5.10	4.10	2.01
1.80V	120.83	88.33	71.67	47.58	29.75	17.50	12.42	9.67	7.90	5.03	4.03	1.93
1.85V	106.66	81.66	67.84	46.21	29.38	17.46	12.38	9.63	7.85	4.96	3.96	1.86

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	2,110.00	1,350.00	1,020.00	622.00	367.00	212.00	151.00	118.00	96.10	63.00	51.30	26.50
1.67V	1,886.00	1,259.00	972.40	609.40	366.30	211.30	150.30	117.30	96.03	62.30	50.39	25.38
1.70V	1,790.00	1,220.00	952.00	604.00	366.00	211.00	150.00	117.00	96.00	62.00	50.00	24.90
1.75V	1,620.00	1,140.00	906.00	587.50	361.50	210.50	149.50	116.50	95.40	61.20	49.15	24.05
1.80V	1,450.00	1,060.00	860.00	571.00	357.00	210.00	149.00	116.00	94.80	60.40	48.30	23.20
1.85V	1,280.00	980.00	814.00	554.50	352.50	209.50	148.50	115.50	94.20	59.60	47.45	22.35

GP12650**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	270.83	173.33	131.67	79.92	47.17	27.25	19.40	15.08	12.40	8.08	6.58	3.41
1.67V	241.67	161.67	125.25	78.28	47.05	27.19	19.30	15.02	12.30	8.00	6.48	3.26
1.70V	229.17	156.67	122.50	77.58	47.00	27.17	19.25	15.00	12.25	7.96	6.43	3.20
1.75V	207.50	146.67	116.67	75.50	46.46	27.09	19.17	14.96	12.17	7.86	6.32	3.09
1.80V	185.83	136.67	110.83	73.42	45.92	27.00	19.08	14.92	12.08	7.76	6.21	2.98
1.85V	164.16	126.67	105.00	71.34	45.38	26.92	19.00	14.88	12.00	7.66	6.10	2.87

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	3,250.00	2,080.00	1,580.00	959.00	566.00	327.00	232.00	181.00	148.00	97.00	79.00	40.90
1.67V	2,900.00	1,940.00	1,503.00	939.40	564.60	326.30	231.30	180.30	147.30	95.95	77.67	39.15
1.70V	2,750.00	1,880.00	1,470.00	931.00	564.00	326.00	231.00	180.00	147.00	95.50	77.10	38.40
1.75V	2,490.00	1,760.00	1,400.00	906.00	557.50	325.00	230.00	179.50	146.00	94.30	75.80	37.05
1.80V	2,230.00	1,640.00	1,330.00	881.00	551.00	324.00	229.00	179.00	145.00	93.10	74.50	35.70
1.85V	1,970.00	1,520.00	1,260.00	856.00	544.50	323.00	228.00	178.50	144.00	91.90	73.20	34.35

GP121000**Constant Current Discharge Characteristics Unit:Amperes(25°C, 77°F)**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	387.50	252.50	193.33	119.17	71.42	42.00	29.75	23.40	19.25	12.58	10.33	5.37
1.67V	363.58	242.58	188.08	118.00	71.36	41.71	29.69	23.30	19.19	12.52	10.22	5.22
1.70V	353.33	238.33	185.83	117.50	71.33	41.58	29.67	23.25	19.17	12.50	10.17	5.16
1.75V	329.17	227.50	179.58	115.42	70.92	41.54	29.64	23.21	19.09	12.38	10.00	5.02
1.80V	305.00	216.67	173.33	113.33	70.50	41.50	29.60	23.17	19.00	12.25	9.83	4.87
1.85V	280.84	205.84	167.08	111.25	70.09	41.46	29.57	23.13	18.92	12.13	9.66	4.73

Constant Power Discharge Characteristics Unit:Watts(25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	4,650.00	3,030.00	2,320.00	1,430.00	857.00	504.00	357.00	280.00	231.00	151.00	124.00	64.40
1.67V	4,363.00	2,911.00	2,257.00	1,416.00	856.30	500.50	356.30	279.30	230.30	150.30	122.60	62.65
1.70V	4,240.00	2,860.00	2,230.00	1,410.00	856.00	499.00	356.00	279.00	230.00	150.00	122.00	61.90
1.75V	3,950.00	2,730.00	2,155.00	1,385.00	851.00	498.50	356.00	278.50	229.00	148.50	120.00	60.15
1.80V	3,660.00	2,600.00	2,080.00	1,360.00	846.00	498.00	356.00	278.00	228.00	147.00	118.00	58.40
1.85V	3,370.00	2,470.00	2,005.00	1,335.00	841.00	497.50	356.00	277.50	227.00	145.50	116.00	56.65

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