



GPL 121000

12V 100.0Ah

GPL 121000 is a general purpose battery with 10 years expected life under normal float charge. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
Weight	Approx. 35kg(77.2 lbs)
Maximum Discharge Current	800A(5sec)
Internal Resistance	Approx. 4.5mΩ
Operating Temperature Range	Discharge: -20°C~50°C (-4°F~122°F) Charge: -20°C~50°C (-4°F~122°F) Storage: -20°C~40°C (-4°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Flood Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	30A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	CSB Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Thread Insert & Bolt
Container Material	-Polypropylene (UL94-HB)*Flammability resistance of UL94-V0 can be available upon request.

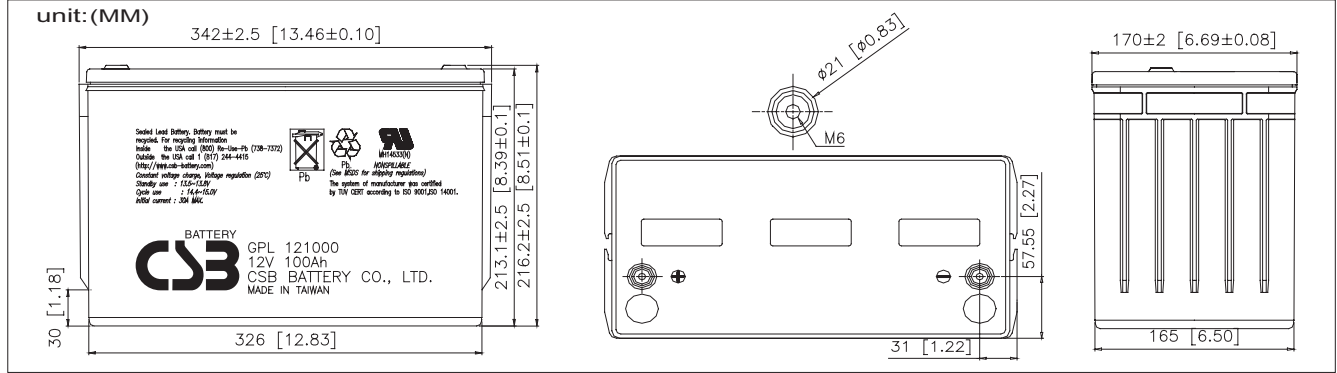
UL
MH14533(N)

TÜV CERT
ISO 9001
No.041005117

RWTV
ISO 14001
NO. UM 1-12-0045

CSB-manufactured batteries are UL-recognized components under UL924 and UL1989. CSB is also certified by ISO 9001 and ISO 14001.

Dimensions



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

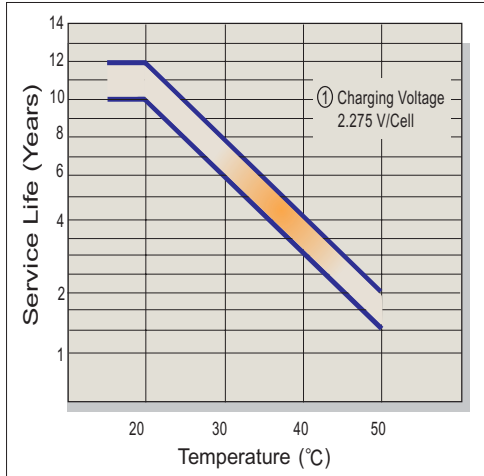
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	411.0	273.0	198.0	118.0	67.6	38.3	27.3	21.2	18.1	11.90	9.98	5.15
1.67V	386.0	256.5	194.0	115.0	66.9	37.9	27.0	21.0	18.0	11.80	9.93	5.12
1.70V	361.0	240.0	190.0	112.0	66.1	37.4	26.6	20.8	17.8	11.70	9.88	5.09
1.75V	319.5	222.0	184.0	107.5	64.2	36.8	26.1	20.5	17.5	11.50	9.69	5.05
1.80V	278.0	204.0	178.0	103.0	62.3	36.2	25.6	20.1	17.2	11.30	9.50	5.00
1.83V	253.1	193.2	174.4	100.3	61.2	35.8	25.3	20.0	17.0	11.18	9.39	4.97

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

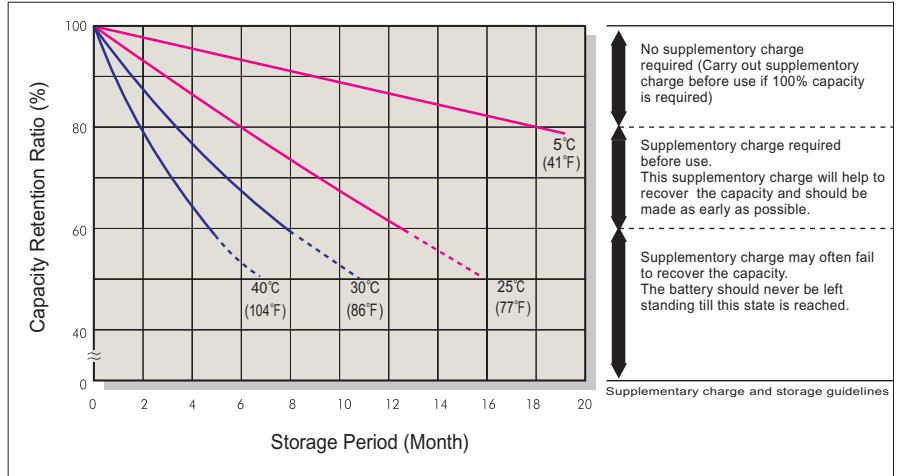
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	4330	3000	2210	1350	788.0	449.0	321.0	250.0	216.0	142.0	120.0	67.5
1.67V	4115	2830	2145	1330	780.5	444.0	317.5	249.0	215.0	141.5	119.5	67.2
1.70V	3900	2660	2080	1310	773.0	439.0	314.0	248.0	214.0	141.0	119.0	66.9
1.75V	3500	2450	2005	1250	753.5	431.0	309.5	243.5	210.0	138.5	117.0	65.7
1.80V	3100	2240	1930	1190	734.0	423.0	305.0	239.0	206.0	136.0	115.0	64.5
1.83V	2860	2114	1885	1154	722.3	418.2	302.3	236.3	203.6	134.5	113.8	63.8

● All mentioned values are average values.

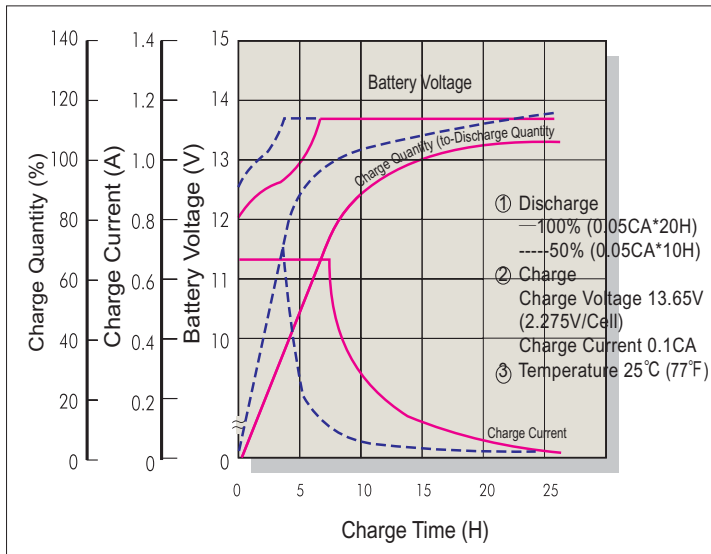
Trickle (or Float) Service Life



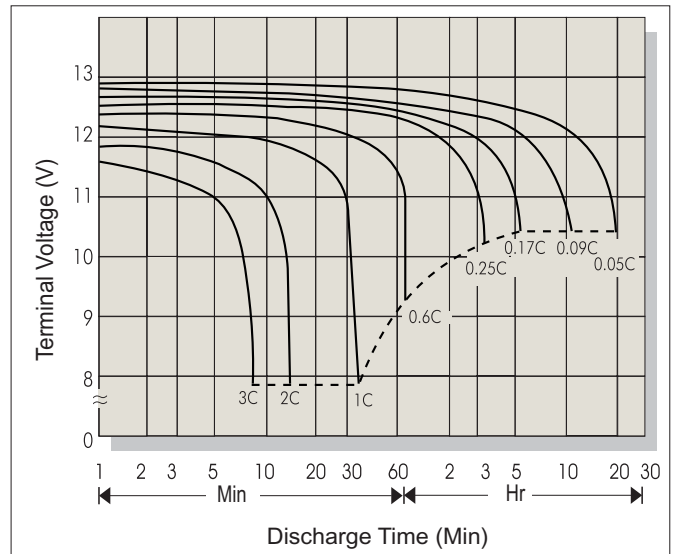
Capacity Retention Characteristic



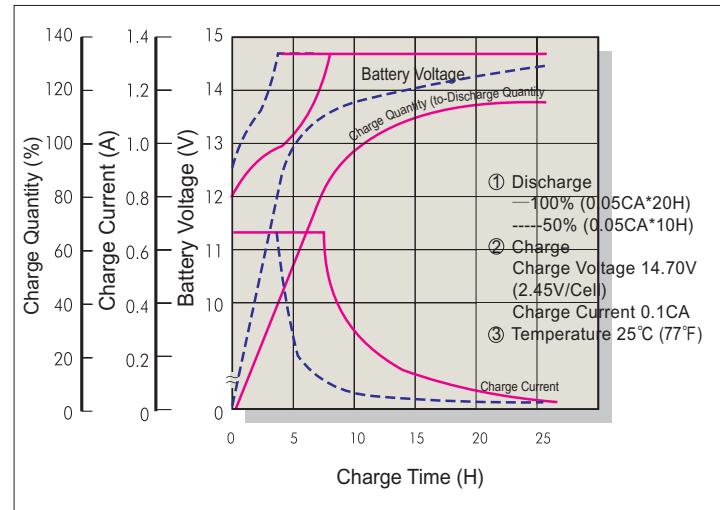
Battery Voltage and Charge Time for Standby Use



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



Battery Voltage and Charge Time for Cycle Use



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.55	1.30
Discharge Current (A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	