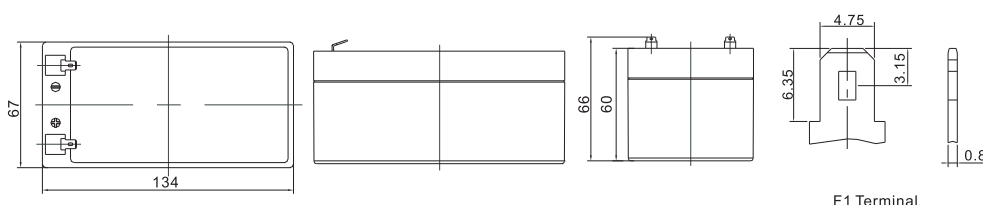


GP1233F1 12V 3.3Ah



Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	3.3Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.25 Kg (Tolerance ± 5.0%)
Internal Resistance	Approx. 54 mΩ
Terminal	F1
Max. Discharge Current	33A (5 sec)
Short Circuit Current	166A
Design Life	6~8 years (Float charging)
Max. Charging Current	0.96 A C3 2.48AH
Reference Capacity	C20 3.30AH
Standby Use Voltage	13.7 V~13.9 V @ 25°C
Cycle Use Voltage	
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Length	134±1.5mm (5.28 inches)
Width	67±1.5mm (2.64 inches)
Height	60±1.5mm (2.36 inches)
Total Height	66±1.5mm (2.60 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

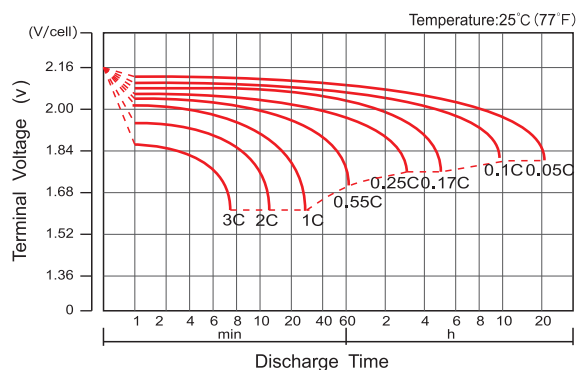
Unit: mm

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	12.14	8.581	6.203	3.563	1.955	1.200	0.902	0.729	0.604	0.389	0.316	0.167
1.65V	11.29	8.108	5.930	3.420	1.888	1.162	0.875	0.709	0.588	0.384	0.312	0.164
1.70V	10.19	7.465	5.554	3.269	1.827	1.124	0.851	0.690	0.573	0.378	0.307	0.162
1.75V	9.127	6.833	5.169	3.125	1.760	1.085	0.825	0.672	0.558	0.373	0.303	0.160
1.80V	8.014	6.185	4.773	2.987	1.693	1.046	0.800	0.653	0.544	0.367	0.299	0.158
1.85V	6.361	5.055	3.960	2.572	1.518	0.958	0.739	0.607	0.507	0.344	0.282	0.150

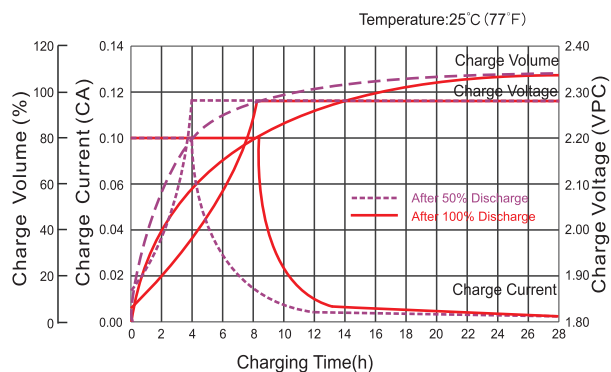
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	20.13	14.59	10.84	6.471	3.674	2.275	1.724	1.399	1.164	0.759	0.620	0.328
1.65V	18.93	14.05	10.52	6.278	3.568	2.213	1.677	1.366	1.138	0.752	0.614	0.323
1.70V	17.47	13.17	10.00	6.060	3.474	2.152	1.639	1.334	1.112	0.742	0.605	0.320
1.75V	16.00	12.27	9.442	5.852	3.367	2.087	1.597	1.305	1.088	0.733	0.598	0.316
1.80V	14.35	11.30	8.842	5.650	3.257	2.022	1.554	1.272	1.063	0.722	0.591	0.314
1.85V	11.63	9.402	7.441	4.914	2.939	1.863	1.443	1.186	0.995	0.680	0.557	0.298

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

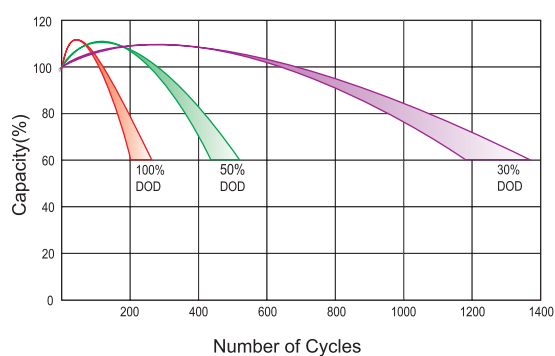
Discharge Characteristics Curve



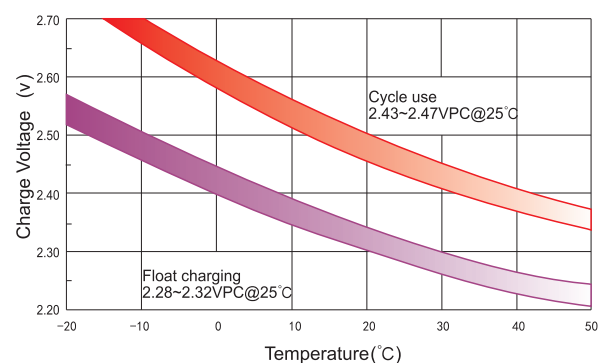
Charge Characteristic Curve For Standby Use



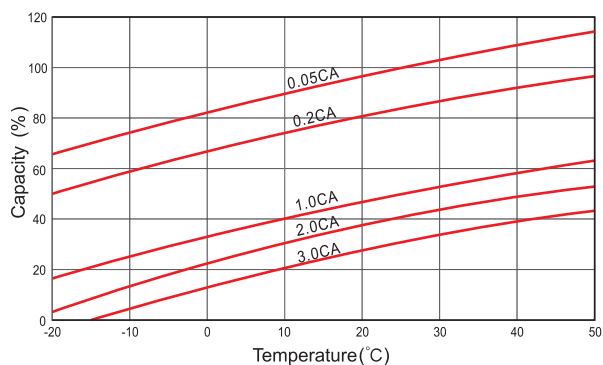
Cycle Life In Relation To Depth Of Discharge



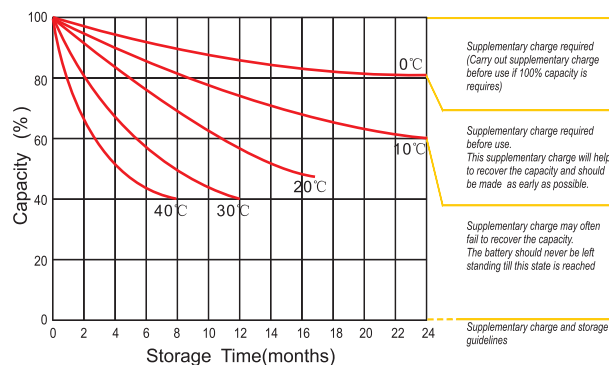
Relationship Between Charging Voltage And Temperature



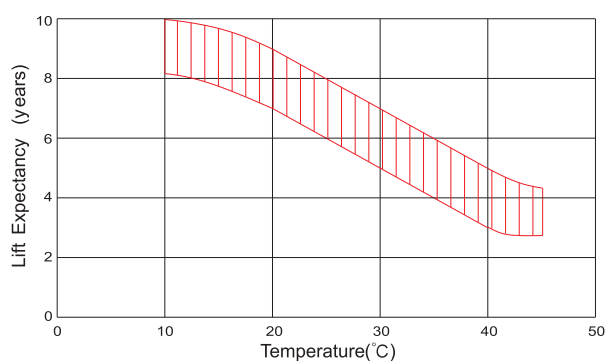
Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

