Maple Armor

3-FM-7.2 6V7.2Ah

General Series Battery

FM series batteries are Maple Armor brand universal lead-acid batteries. Using high-quality lead calcium multi-element alloy plates, with high rate discharge capacity; High performance cast welded grid, with conductivity 30% higher than ordinary batteries; Internally, it adopts integrated casting and welding, reducing internal resistance by 20% and better adapting to high current discharge; Unique AGM technology enables higher energy density and stronger charging acceptance of batteries; Imported ABS raw materials and self-made shell, using self-developed automatic sealing technology, make the battery a complete whole, greatly improving sealing performance; Copper terminals (plug-in/vertical/downward rotation) not only meet the needs of high current charging and discharging, but also have flexible installation and more convenient maintenance. This series of batteries is manufactured using internationally advanced automated production lines, with high stability and consistency, and a longer service life. Design lifespan up to 5 years (25 ℃)

Application

* Emergency Power System
* Communication equipment
* Telecommunication systems
* Uninterruptible power supplies
* Electric toy car and wheelchairs, etc.
* Power tools
* Alarm system
* Marine equipment
* Medical equipment
* Fire and Security System

General Features

* Heavy Duty Grid
* Mechanized assembly
* Non-spillable construction
* High Reliability and Stability
* Sealed and Maintenance-free
* Long Life and low self-discharge design

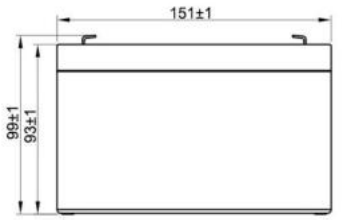
Construction

* Positive ..... Lead dioxide
* Electrolyte ..... Sulfuric acid
* Separator ..... Fiber glass
* Negative ..... Lead
* Safety Valve ..... EPDR
* Terminal ..... Copper
* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)

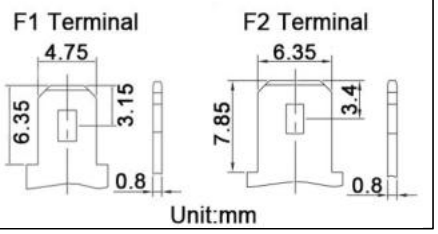
Specification

Battery Model	Nominal Voltage		6V (3 cells per unit)	
	Rated capacity (20 Hour rate)		7.2Ah	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	35mm (1.38 inches)	93mm (3.66 inches)	99mm (3.90 inches)
Approx Weight	1.03kg(2.27 lbs) ± 3%			
Internal Resistance	Full charged at 25℃(77℉):Approx12.90mΩ			
Maximum Charge Current	2.16A			
Max.discharge current	108A (5Sec.)			
Short-circuit current	250A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25℃(77℉)	-15℃~ 50℃(5℉~122℉)	-15℃~ 40℃(5℉~104℉)	-15℃~ 40℃(5℉~104℉)
Capacity @ 25℃ (77℉)	20 hour rate(0.36A,10.5V)	10 hour rate(0.66A,10.5V)	3 hour rate(1.86A,10.2V)	1 hour rate(4.46A,9.6V)
	7.2Ah	6.60Ah	5.58Ah	4.46Ah
Capacity affected by Temp.(20HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Charge method	Float Charging Voltage		Cycle Use Charging Voltage	
	6.75 ~ 6.90 VDC/Unit at 25℃(77℉)		7.25~ 7.50 VDC/Unit at 25℃(77℉)	

Outer dimension (mm)



Terminal Type

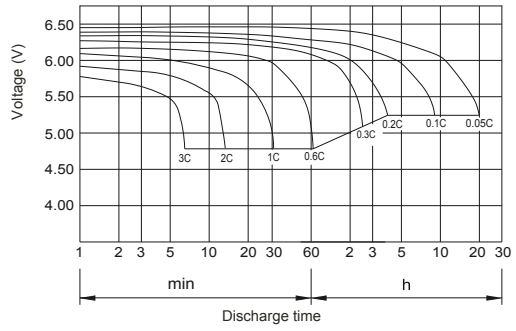


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

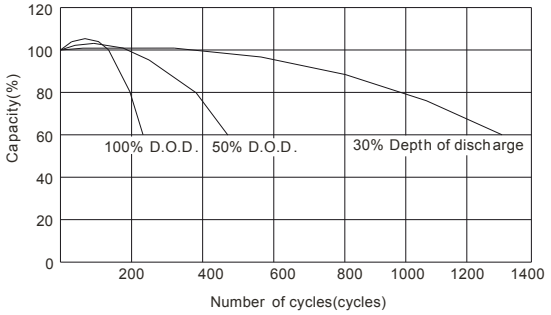
F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	20.10	14.30	10.80	8.75	6.61	3.98	2.41	1.76	1.140	0.750	0.639	0.348
	W	37.70	27.00	20.60	16.73	12.80	7.79	4.74	3.48	2.264	1.493	1.278	0.696
1.80V/cell	A	21.70	15.18	11.40	9.18	6.87	4.11	2.48	1.80	1.167	0.768	0.650	0.355
	W	40.06	28.29	21.50	17.38	13.21	8.00	4.86	3.55	2.313	1.526	1.298	0.710
1.75V/cell	A	23.10	16.02	11.90	9.58	7.12	4.23	2.54	1.83	1.190	0.784	0.660	0.360
	W	42.07	29.49	22.21	17.98	13.61	8.20	4.96	3.60	2.354	1.556	1.316	0.719
1.70V/cell	A	24.40	16.82	12.35	9.96	7.36	4.33	2.59	1.86	1.210	0.797	0.669	0.364
	W	43.86	30.59	22.82	18.53	14.00	8.36	5.04	3.65	2.390	1.580	1.333	0.726
1.67V/cell	A	25.10	17.20	12.60	10.15	7.48	4.38	2.61	1.88	1.217	0.802	0.672	0.366
	W	44.82	31.10	23.17	18.81	14.19	8.43	5.08	3.69	2.402	1.589	1.338	0.730
1.60V/cell	A	26.20	17.90	13.10	10.49	7.67	4.46	2.65	1.91	1.230	0.810	0.678	0.368
	W	46.36	32.04	23.91	19.32	14.49	8.57	5.14	3.74	2.425	1.604	1.349	0.734

Note: The above datas are average values. (Edition 2024-05)

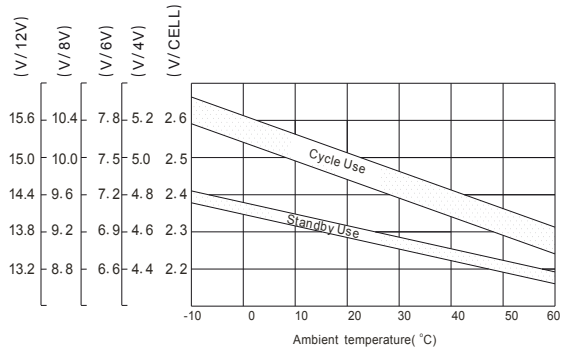
Discharge characteristic Curve



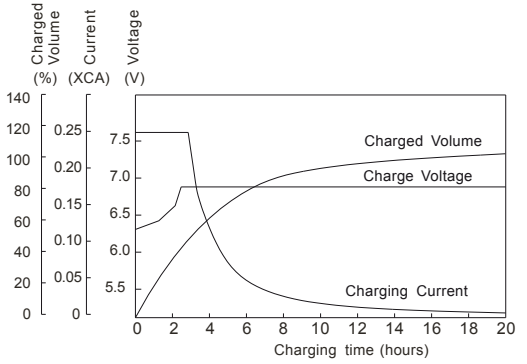
Cycle service life in relation to depth of discharge



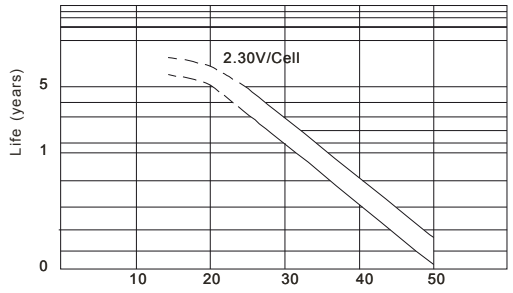
Relationship between charging voltage and temperature



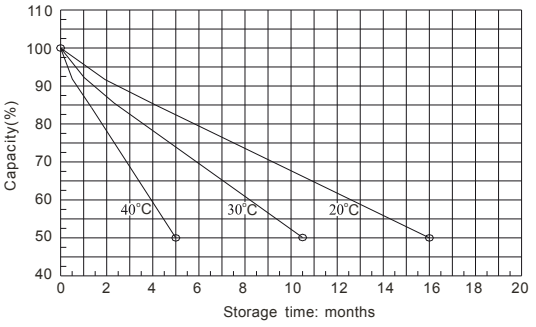
Constant voltage charging characteristic (0.25CA, at 25℃)



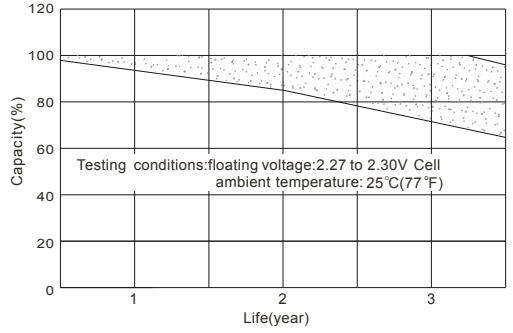
Temperature effects on float life



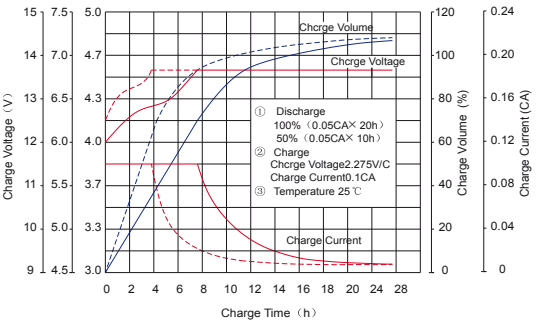
Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use



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