MAXON®
BATTERIES

MX12-2.9HD
Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage		12V
Design Floating Life @ 25°C		8 Years
Nominal Capacity @ 25°C (20 hour rate)		3.0Ah
Capacity 25°C (77°F)	10 hour rate	2.85Ah
	5 hour rate	2.4Ah
	27 minute rate	1.48Ah
Internal Resistance	Full Charged Battery @ 25°C	≤32mΩ
Capacity affected by Temperature (20 hour rate)	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
	-15°C (5°F)	70%
Self-Discharge 25°C (77°F) Capacity	after 3 month storage	92%
	after 6 month storage	84%
	after 12 month storage	65%
Charge (Constant Voltage) 25°C (77°F)	Float	Initial Charging Current Less than 0.725A, Voltage 13.6-13.8V
	Cycle	Initial Charging Current Less than 0.58A, Voltage 14.4V – 14.9V

12V Voltage | **2.9Ah** Capacity | **AGM** Technology | **Deep** Cycle

MAXON MX Series sealed maintenance free lead batteries are designed with AGM technology, high performance pure lead plates and sulfuric acid electrolyte to gain extra power output for common power backup system applications widely used in the fields of UPS, Security and Emergency lighting system.

They are sealed and free maintenance whole life, valve regulated type standby AGM battery, also named by VRLA battery, SLA battery, and SMF battery.

GENERAL FEATURES

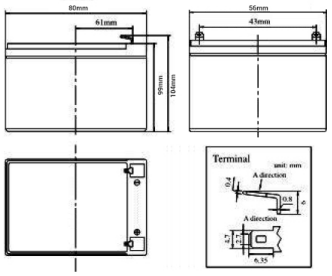
- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C-40°C
- Lead Aluminum calcium Tin alloy high energy, prevent

BATTERY DIMENSIONS

Length (mm)	80
Width (mm)	56
Height (mm)	99
Total Height (mm)	104
Weight (kg)	1.285

APPLICATIONS

- Measuring equipment and instrument
- Telephone sets
- Lighting equipment
- Security systems
- UPS power supply



Solar | UPS | Standby

CE | CERTIFIED ISO 9001 ISO 14001 PRODUCER | AGM

COMPLIED STANDARDS

IEC 60896-21/22	JIS C8704
IEC61427	BS6290 part4
GB/T 19638	CE/ISO

BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Watts at 77°F 25°C)

End Voltage	5mins	10mins	15mins	30mins	45mins	1h	1.5h	2h	3h	5h	8h	10h	20h
10.2	11.21	7.484	5.957	3.061	2.298	1.820	1.453	1.076	0.814	0.520	0.347	0.288	0.154
10.5	10.75	7.346	5.829	2.960	2.243	1.811	1.425	1.039	0.789	0.511	0.344	0.285	0.153
10.8	10.17	7.162	5.672	2.859	2.151	1.793	1.397	0.993	0.760	0.502	0.340	0.280	0.151

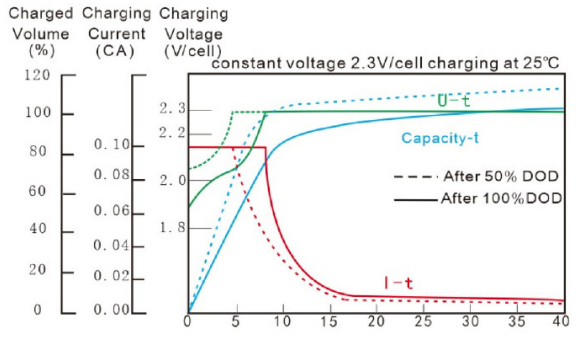
Discharge Constant Power per Cell (Watts at 77°F 25°C)

End Voltage	5mins	10mins	15mins	30mins	45mins	1h	1.5h	2h	3h	5h	8h	10h	20h
10.2	122.3	88.16	71.37	40.30	29.38	22.36	17.15	12.90	9.203	6.068	4.275	3.457	1.866
10.5	117.2	85.24	69.25	39.48	28.71	22.00	16.90	12.71	9.000	5.994	4.238	3.411	1.839
10.8	111.1	82.07	67.00	38.33	27.99	21.63	16.64	12.53	8.844	5.930	4.192	3.346	1.811

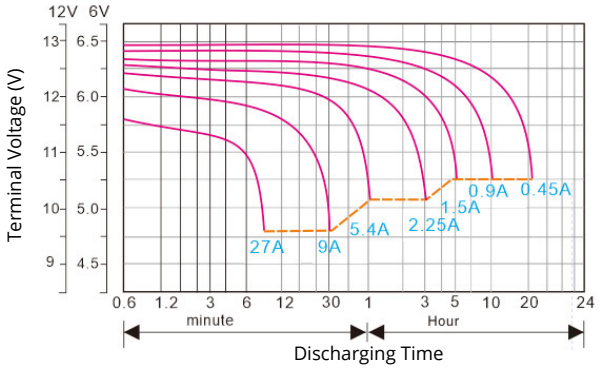
Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

PERFORMANCE CHARACTERISTICS

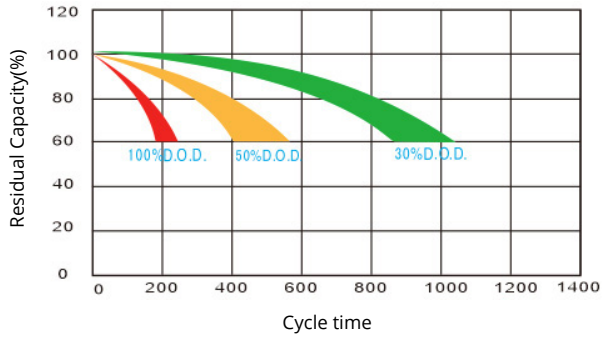
Charge Characteristics (25°C/77°F)



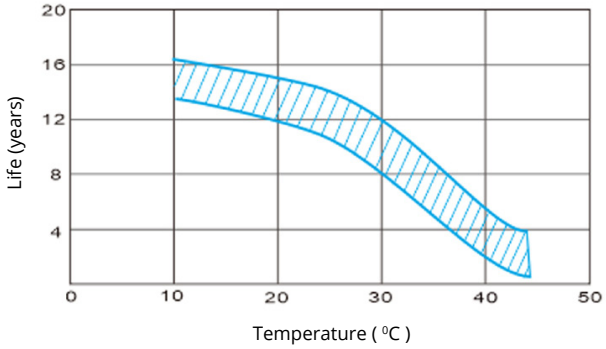
Discharge Characteristic (25°C/77°F)



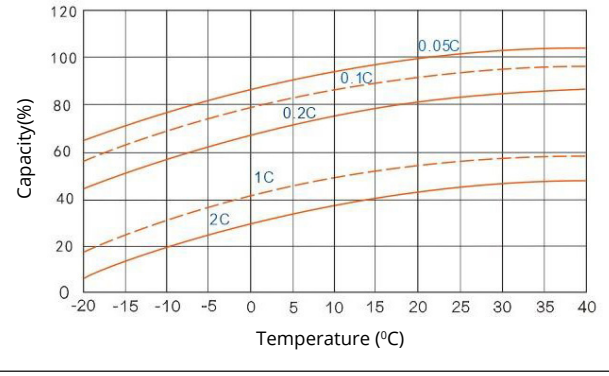
Cycle Life in Relation to Depth of Discharge



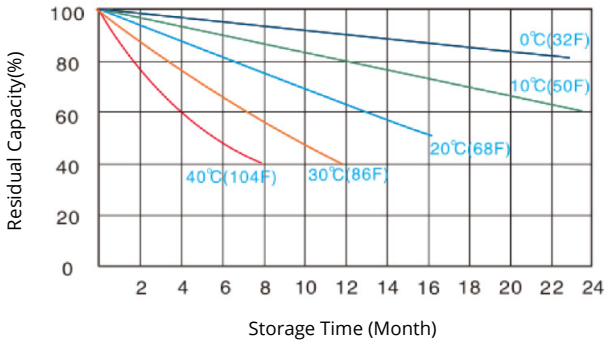
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombinati on efficiency	ABS (UL94-V0)	Flame Si-Rubber and aging resistance	F1/F2	Advanced AGM separator for high pressure cell design	Dilute high purity sulfuric acid	Two layers epoxy resin seal