General features for MPPV Series battery (OPzV)

* Tubular positive plate;separator with the combined application of porous rubber and porous PVC,separator is with a high porosity & good corrosion resistance.
  Gelled electrolyte technology.
* Computer designed lead, calcium tin alloy grid for high power density.
* Long service life, maintenance-free during the whole service life.
* Alloy (no antimony) and internal oxygen recombination ensure low gassing .
* High cyclic ability,no internal short circuits in the GEL structure.
* Easy to move and handle ,easy using cable connectors or copper connectors in the battery connection..

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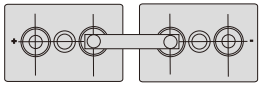
MPPV2-350 (2V350Ah)

Specifications

Nominal Voltage		2 V
Rated capacity (10 hour rate)		350 Ah
Dimensions (±3mm)	Total Height (Include terminal)	506mm (19.9inches)
	Height	470mm (18.5inches)
	Length	124mm (4.88inches)
	Width	206mm (8.11inches)
Approx weight (±5%)		26.5Kg (58.3lbs)

Battery picture and construction

Connection method for reference:

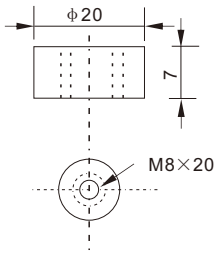


Battery Construction

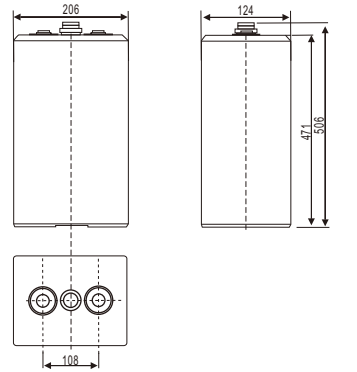
Component	Positive plate	Negative plate	Container	Cover
Raw material	Lead dioxide	Lead	ABS	ABS
Component	Electrolyte	Separator	Safety valve	Terminal
Raw material	Gelled acid	PVC	Rubber	Copper

Outer dimension and terminal

Terminal:TP



Outer dimensions(±3mm)Unit:mm



Characteristics

Capacity 25℃(77℉)	10 hour rate(35A,1.8V) 3 hour rate(91A,1.75V) 1 hour rate(196A,1.60V)	350Ah 273Ah 196Ah
Internal Resistance	Full charged battery at 25℃(77℉)	Approx 0.8 mΩ
Capacity affected by Temperature (10hour rate)	40℃ (104℉) 25℃ (77℉) 0℃ (32℉) -15℃ (5℉)	103% 100% 85% 65%
Remaining capaicty Self-Discharge At 25℃(77℉)	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	94% 88% 75%
Terminal type		TP (copper)
Max. Discharge current 25℃/(77℉)		1750A (5Seconds)
Nominal operating temperature		25℃ ±5℃(77□ ±9□)
Operating Temperature Range	Discharge Charge Storage	-15℃～50℃ (5℉～122℉) -10℃～50℃ (14℉～122℉) -20℃～50℃ (-4℉～122℉)
Charge methods (constant Voltage) At 25℃(77℉)	Cycle use	Initial Charging Current less than 87.5 A Voltage 2.40-2.50V Temperature compensation:-4mV/℃
	Standby use	Voltage 2.25-2.30V Temperature compensation:-3mV/℃

Constant current discharge (25℃ , 77 ℉)

Unit:A

Constant Current(Amp) Discharge Table at 25℃(77℉)										
Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.65V	292	193	120	92.4	74.6	63.7	54.6	43.1	35.7	18.8
1.70V	283	191	119	91.7	73.9	63.0	54.3	42.7	35.4	18.7
1.75V	276	188	117	91.0	73.5	62.7	53.9	42.4	35.3	18.7
1.80V	266	182	114	88.2	71.4	60.9	52.2	41.0	35.0	18.6
1.85V	252	173	109	83.7	67.9	57.8	49.7	38.9	33.3	17.6

(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

Constant power discharge (25℃ , 77 ℉)

Unit:watts

Constant Power(Watt) Discharge Table at 25℃(77℉)										
Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.65V	545	373	232	181	146	125	108	85.1	70.7	37.8
1.70V	529	364	230	180	145	124	107	84.4	70.7	37.5
1.75V	516	357	226	179	144	124	106	84.0	70.0	37.5
1.80V	497	346	221	173	140	120	103	81.2	69.7	37.1
1.85V	472	329	210	164	133	114	98	77.0	66.2	35.2

(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

OPzV Battery
(Maintenance-free;Tubular plate & GEL technology)

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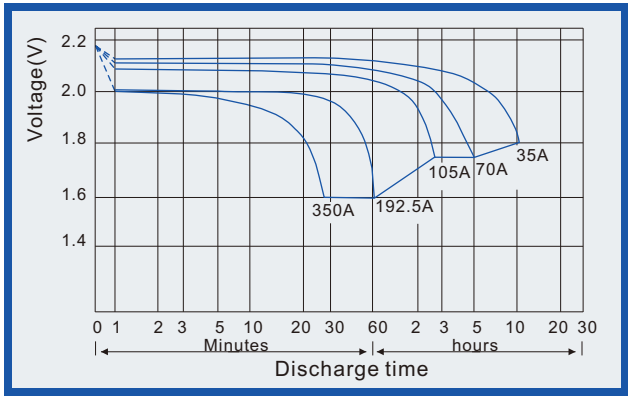
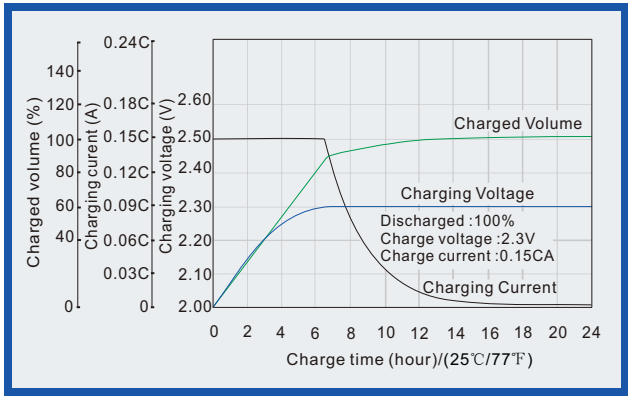
MPPV2-350 (2V350Ah)

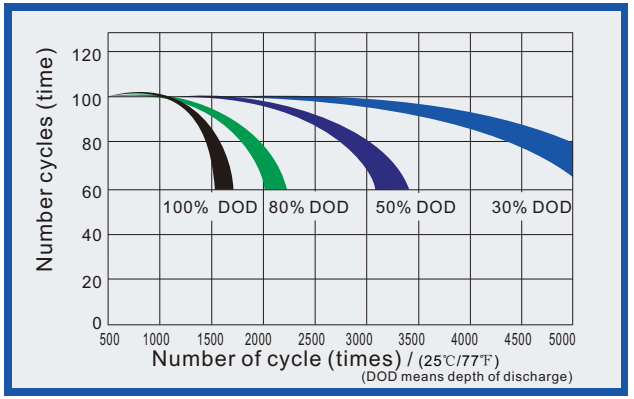
Discharge characteristics (25℃,77℉)



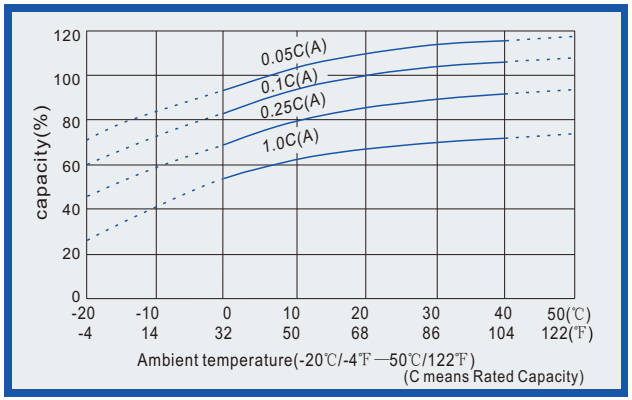
Charge characteristics (25℃,77℉)



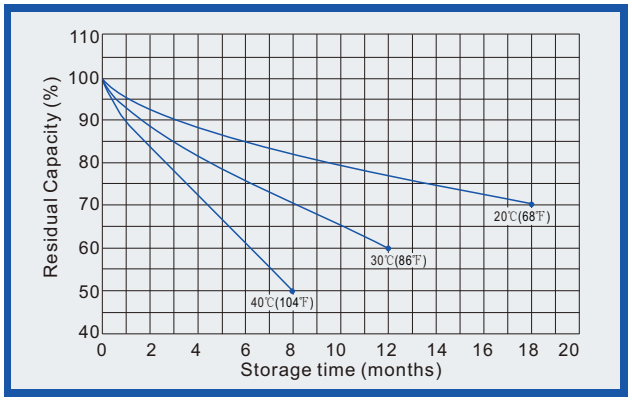
Life characteristics of Cyclic Use (25℃,77℉)



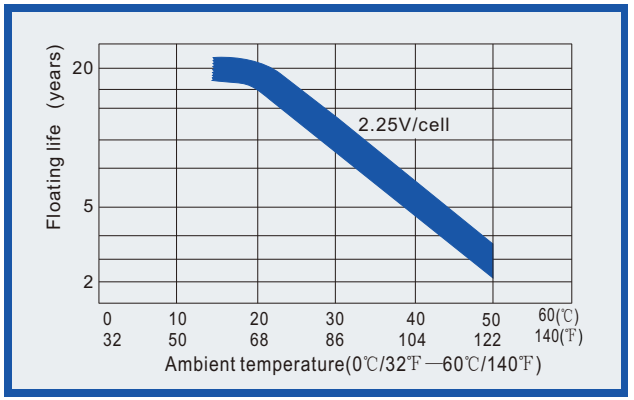
Effect of Temperature on capacity



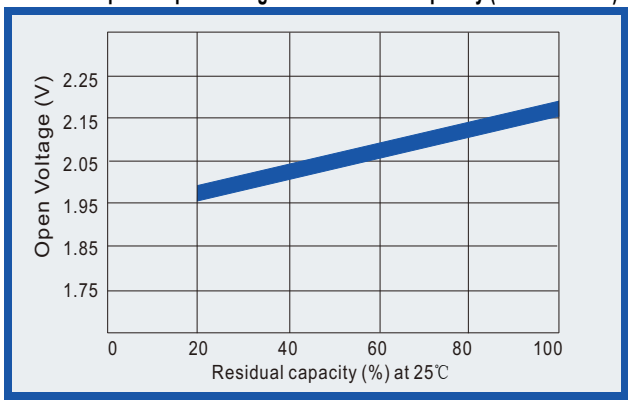
Self-discharge characteristics(with full charging)



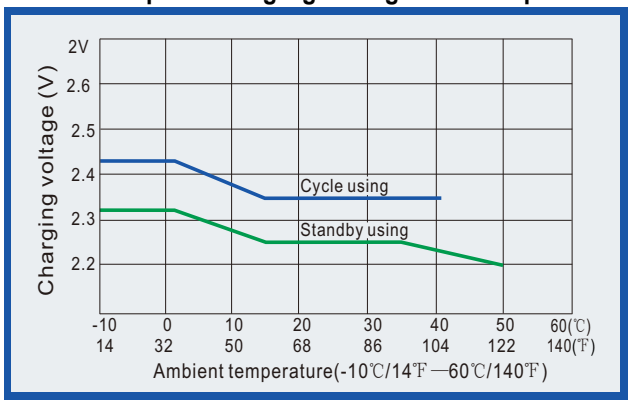
Relationships for floating life and temperature



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Effect of temperature on capacity