

Product Features

- General purpose VRLA battery
- Absorbent Glass Mat (AGM) technology for superior performance
- Power to volume ratio yielding unrivalled energy density
- Fire Retardant Case to UL94:V0
- Valve regulated, maintenance free spill proof construction
- Rugged impact resistant ABS case and cover
- Low self-discharge rate for long shelf life



Product Applications



Solar



Emergency Lighting



Alarms



Cash Registers



Telecommunications



Uninterrupted Power Supply

Physical Specifications

Model	Dimensions (±1mm/inch)				Weight (±5%kg/lbs)	Terminal Type	Container
ASB12-2.3FR	Length	Width	Height	Total Height	0.9/1.98	4.75 Faston	ABS (UL94: V-0)
	178/7.01	34/1.34	60/2.36	66/2.60			

Product Specifications

Nominal Voltage	Rated Capacity 25 °C/77 °F	Operating Temp.Range	Capacity Effected Temp	Capacity vs Storage Time
12V	20HR(10.5V) 2.3Ah	Discharge: -15 °C~50 °C(5 °F~122 °F)	40 °C (104 °F):102%	Three months : 91% Six months : 82% Twelve months : 65%
	10HR(10.5V) 2.1Ah	Charge: -10 °C~50 °C(14 °F~122 °F)	25 °C (77 °F):100%	
	1HR(9.60V) 1.4Ah	Storage: -20 °C~50 °C(-4 °F~122 °F)	0 °C (32 °F):85%	
		Nominal: 25 °C±3 °C(77 °F±5 °F)	-15 °C (5 °F):65%	

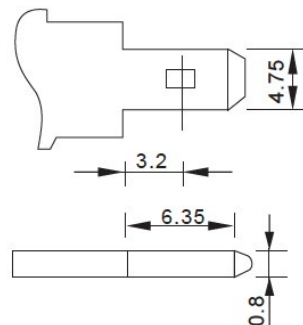
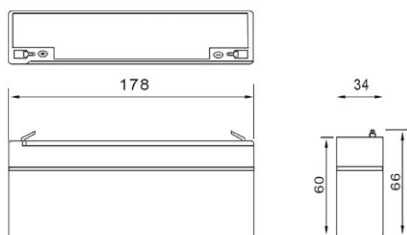
Constant Current Discharge Characteristics Unit:A (@ 25 °C (77 °F))

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	8.79	5.57	4.35	2.45	1.51	0.82	0.57	0.47	0.40	0.22	0.117
9.90V	8.52	5.40	4.24	2.40	1.48	0.82	0.57	0.47	0.40	0.22	0.116
10.2V	8.17	5.18	4.09	2.33	1.45	0.81	0.56	0.47	0.40	0.22	0.116
10.5V	7.82	4.95	3.95	2.27	1.42	0.80	0.56	0.46	0.39	0.21	0.115
10.8V	7.38	4.68	3.74	2.19	1.37	0.78	0.54	0.45	0.38	0.21	0.113

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

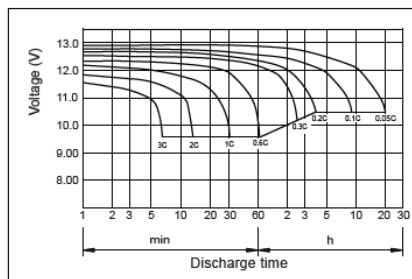
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	98.1	62.8	49.6	28.1	17.4	9.64	6.77	5.62	4.79	2.61	1.4
9.90V	95.1	60.9	48.4	27.5	17.2	9.58	6.73	5.58	4.76	2.6	1.4
10.2V	91.2	58.4	46.6	26.7	16.7	9.5	6.69	5.54	4.73	2.59	1.39
10.5V	87.3	55.9	45	26	16.4	9.36	6.64	5.51	4.7	2.58	1.38
10.8V	82.4	52.7	42.6	25.1	15.9	9.12	6.44	5.34	4.56	2.52	1.35

Battery Dimensions (mm)

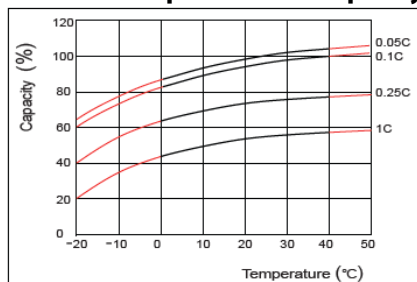


Electrical Characteristics

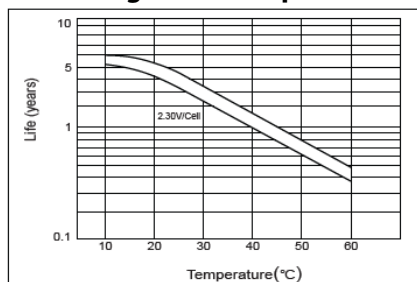
Discharge Characteristics @ 25 °C (77 °F)



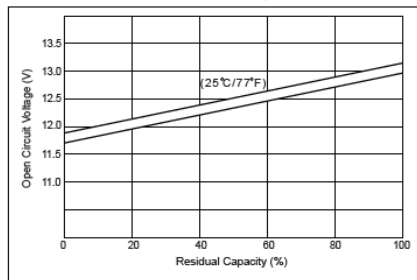
Effect of temperature on capacity



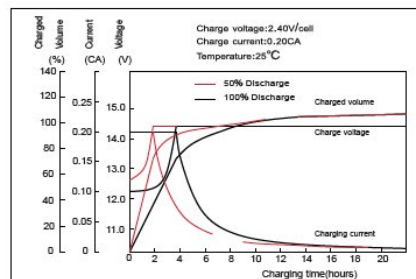
Floating life on temperature



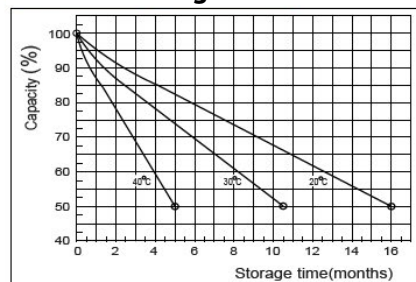
OCV & Capacity 25 °C



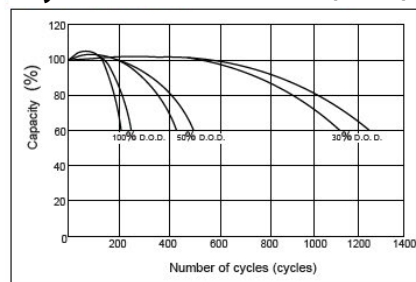
Charge Characteristics @ 25 °C (77 °F)



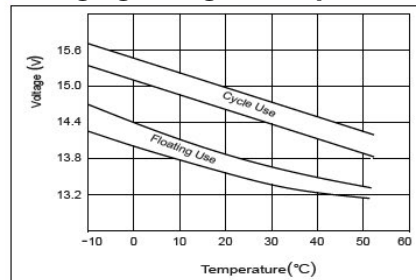
Self-discharge characteristic



Cycle life on D.O.D 25 °C (77 °F)



Charging voltage & Temperature



Usage and Maintenance

Floating Voltage (25°C)

13.50 to 13.80V
Temperature compensation:
-18mV/°C