

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
	Length	Width	Height	Total Height			
ASB12-3.3FR-RL	134/5.28	67/2.64	61/2.40	67/2.64	1.2/2.65	4.75 Faston	ABS (UL94:V-0)

Product Specifications

Nominal Voltage	Rated Capacity 25 °C/77 °C	Operating Temp.Range	Capacity Effected Temp	Capacity vs Storage Time
12V	20HR(10.5V) 3.3Ah	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) 3.0Ah	Charge: -10 °C~50 °C(14 °F~122 °F)	25 °C (77 °F):100%	
	1HR(9.60V) 2.0Ah	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%	

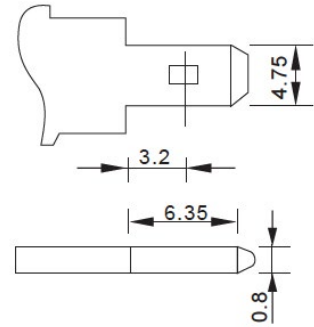
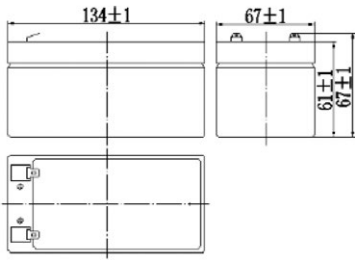
Constant Current Discharge Characteristics Unit:A (@ 25 °C (77 °F))

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	12.2	7.74	6.05	3.41	2.10	1.15	0.79	0.66	0.56	0.30	0.16
9.90V	11.9	7.51	5.90	3.34	2.06	1.14	0.79	0.65	0.55	0.30	0.16
10.2V	11.4	7.20	5.69	3.24	2.01	1.13	0.78	0.65	0.55	0.30	0.16
10.5V	10.9	6.89	5.49	3.16	1.97	1.11	0.78	0.64	0.55	0.30	0.16
10.8V	10.3	6.50	5.20	3.04	1.91	1.08	0.75	0.62	0.53	0.29	0.16

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

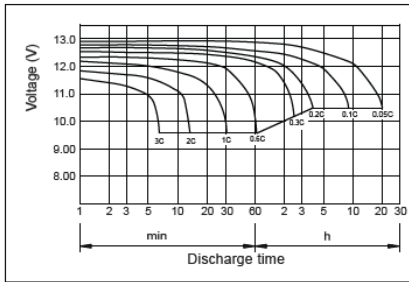
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	136	87.4	68.9	39.1	24.3	13.4	9.42	7.81	6.66	3.64	1.95
9.90V	132	84.7	67.3	38.3	23.9	13.3	9.37	7.77	6.63	3.62	1.94
10.2V	127	81.2	64.8	37.1	23.3	13.2	9.30	7.71	6.58	3.60	1.93
10.5V	121	77.7	62.6	36.2	22.8	13.0	9.24	7.66	6.53	3.58	1.92
10.8V	115	73.4	59.3	34.9	22.1	12.7	8.96	7.43	6.34	3.51	1.88

Battery Dimensions (mm)

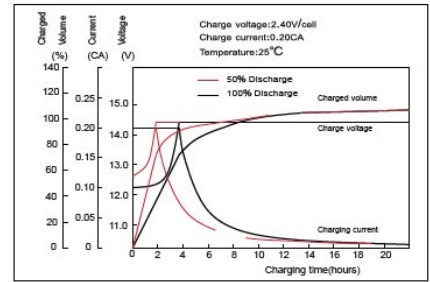


Electrical Characteristics

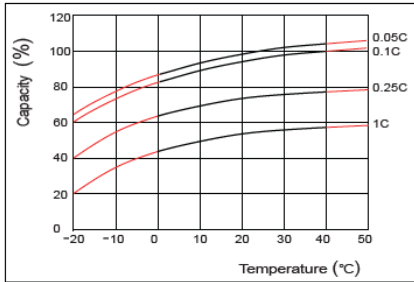
Discharge Characteristics @ 25 °C (77 °F)



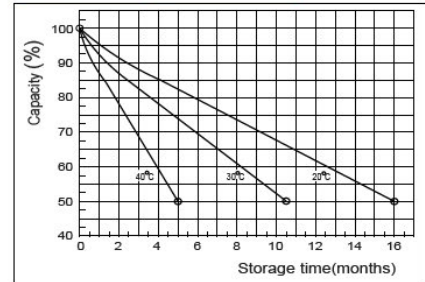
Charge Characteristics @ 25 °C (77 °F)



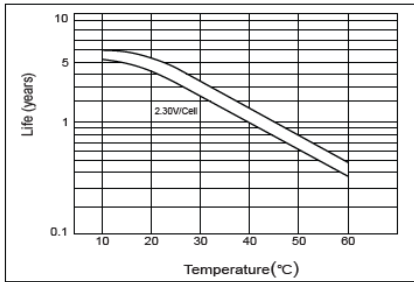
Effect of temperature on capacity



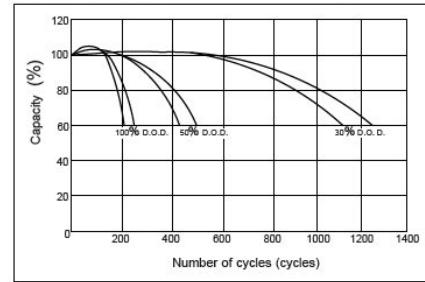
Self-discharge characteristic



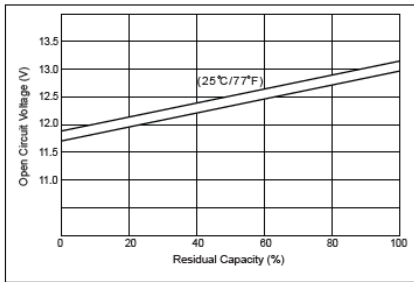
Floating life on temperature



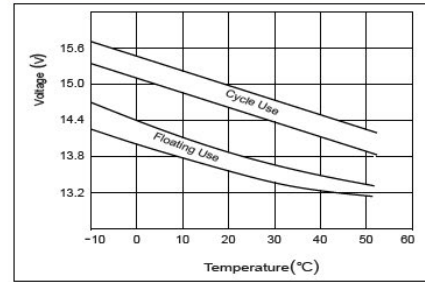
Cycle life on D.O.D 25 °C (77 °F)



OCV & Capacity 25 °C



Charging voltage & Temperature



Usage and Maintenance

Floating Voltage (25°C)

13.50 to 13.80V

Temperature compensation:
-18mV/°C