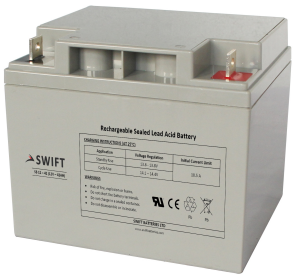
SB12-42 AGM VRLA
12V – 42AH



General Features:

- Designed floating charging service life: 10 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 Aluminium calcium Tin alloy high energy, prevent corrosion

Design Life 10 Years | Low Internal Resistance | High Current Performance | Fast Charging | Recyclable (Pb)

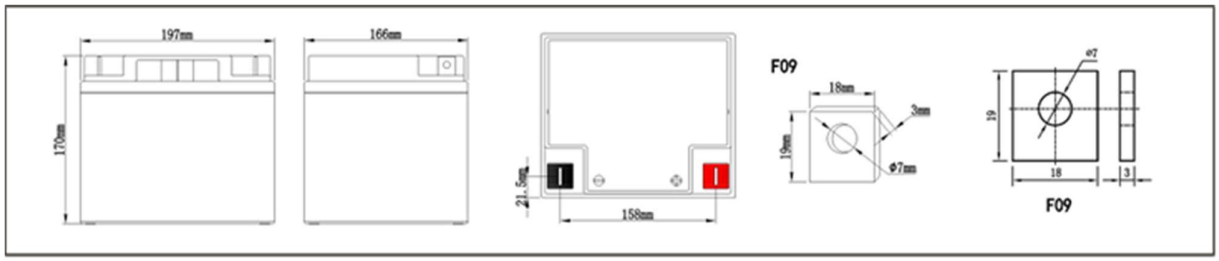
Applications:

Uninterruptible Power Supply (UPS)
Telecom Stations and Power Station
Medical Equipment's
Fire Alarm and Security Systems
DC Power Supply
Emergency Lighting

Physical Specifications:

Nominal Voltage	Nominal Capacity (10HR)	Dimensions				Weight	Internal Resistance (In full charge status)	Standard Terminals
		Length	Width	Height	Total Height			
12V	42AH	197mm	166mm	170mm	170mm	Approx 13.5kg (29.8lbs)	≈8 mΩ	F09 (Standard)

Dimensions:



Constant Voltage Discharge:

Rated Capacity	
20 hour rate (2.1A)	44.7AH
10 hour rate (4.2A)	42.5AH
5 hour rate (7.14A)	36.0AH
3 hour rate (10.5A)	31.7AH
1 hour rate (25.2A)	25.4AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

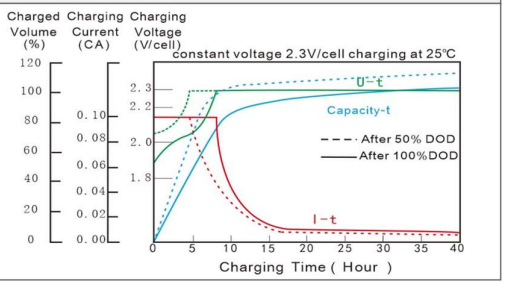
Cycle Application
1. Limit initial current less than 10.5A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.252A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 10.5A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

Battery Discharge Table:

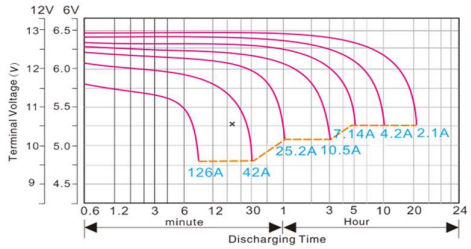
End Voltage (V)	Minutes (M)				Hours (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
1.60	103	82	45.9	39.5	26.8	21.2	18.0	11.0	7.68	5.26	4.41	2.29
1.65	98	78	43.7	38.2	26.3	20.8	17.5	10.9	7.50	5.17	4.37	2.27
1.70	94	74	41.6	36.9	25.5	20.4	17.1	10.6	7.34	5.09	4.32	2.25
1.75	89	71	39.5	35.7	25.0	19.9	16.7	10.4	7.21	4.96	4.28	2.23
1.80	85	67	37.8	34.3	24.6	19.5	16.3	10.2	7.00	4.88	4.24	2.20
Constant Power Discharge Data Sheet (@25°C) Unit: W												
1.60	191.83	159.00	98.50	69.00	57.33	41.83	31.33	23.33	15.00	11.50	8.83	4.75
1.65	182.83	151.50	93.83	66.67	56.00	40.67	30.50	22.67	14.67	11.17	8.73	4.70
1.70	174.00	144.33	89.17	64.50	54.50	39.67	29.83	22.17	14.33	11.00	8.65	4.65
1.75	165.83	137.33	85.00	62.33	53.17	38.83	29.17	21.67	14.00	10.83	8.57	4.60
1.80	157.83	130.83	81.00	60.17	52.00	37.83	28.33	21.17	13.67	10.67	8.48	4.57

Performance Characteristic:

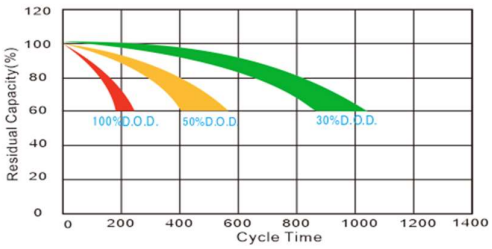
Charge Characteristics (25°C/77°F)



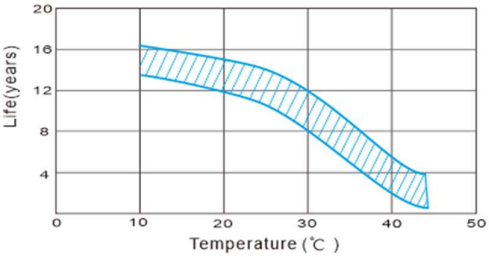
Discharge Characteristic (25°C/77°F)



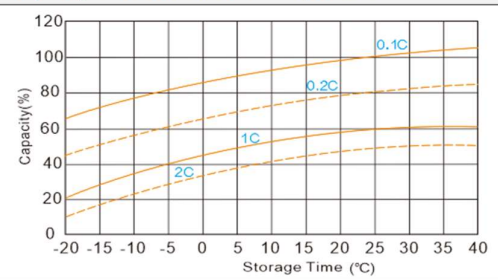
Cycle Life in Relation to Depth of Discharge



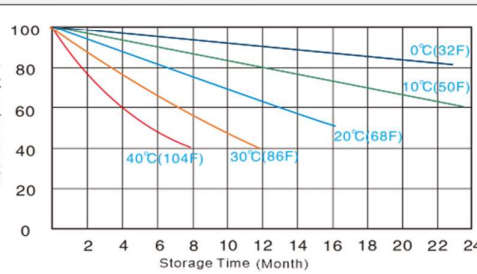
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



Note:
The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation.
Above Information is subject to change. For further queries, please contact info@swiftbatteries.com

SWIFT
Ultimate Power Source

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