

Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	7.5AH	
Dimension	Length	151mm (5.95 inches)
	Width	65mm (2.56 inches)
	Height	94mm (3.70 inches)
	Total Height (with Terminal)	98mm (3.86 inches)
Approximate Weight	2.30 kg (5.06 lbs)	
Terminal Type	T2 / T1	
Rated Capacity	7.50AH	(20hr, 1.75V/cell, 25°C/77°F)
	7.19AH	(10hr, 1.75V/cell, 25°C/77°F)
	6.20AH	(5hr, 1.75V/cell, 25°C/77°F)
	5.94AH	(3hr, 1.60V/cell, 25°C/77°F)
	5.28AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	108A	
Internal Resistance	22mΩ	
Operating Temp. Range	Discharge:	-20°C (-4°F)~50°C (122°F)
	Charge:	-20°C (-4°F)~50°C (122°F)
	Storage:	-20°C (-4°F)~40°C (104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Container Material	ABS (Option: 94-HB & 94-V0 flame retardant case)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Sigmas SP series batteries may be stored for up to 1 year at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



Constant Current Discharge (Amperes) at 25°C (77°F)

F.V. (V/cell)	Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V		33.4	19.4	15.9	9.35	5.28	2.81	1.98	1.27	0.850	0.750	0.390
1.67V		31.5	18.8	15.8	9.32	5.25	2.79	1.96	1.26	0.845	0.729	0.385
1.70V		30.2	18.4	15.6	9.24	5.22	2.78	1.95	1.25	0.840	0.719	0.375
1.75V		28.7	17.8	15.1	9.10	5.18	2.77	1.93	1.24	0.840	0.719	0.375
1.80V		22.8	16.6	14.4	8.81	5.07	2.73	1.92	1.22	0.820	0.708	0.375
1.85V		18.7	16.0	12.1	6.80	4.50	2.40	1.78	1.16	0.780	0.688	0.371

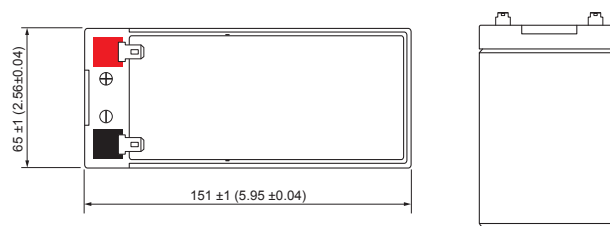
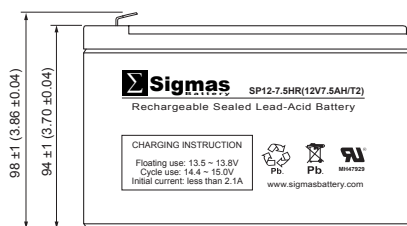
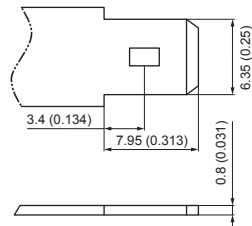
Constant Power Discharge (Watts) at 25°C (77°F)

F.V. (V/cell)	Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V		57.5	36.5	28.7	17.8	10.4	6.02	4.28	2.82	1.94	1.59	0.86
1.67V		55.0	35.3	28.3	17.5	10.3	6.00	4.27	2.79	1.93	1.59	0.86
1.70V		50.8	35.0	27.8	17.3	10.3	6.00	4.25	2.78	1.92	1.58	0.85
1.75V		46.7	34.0	26.8	17.2	10.2	5.97	4.23	2.76	1.88	1.58	0.85
1.80V		42.5	31.3	25.7	16.7	10.1	5.90	4.20	2.75	1.88	1.56	0.84
1.85V		39.2	28.3	22.0	16.2	10.0	5.78	4.13	2.68	1.87	1.54	0.82

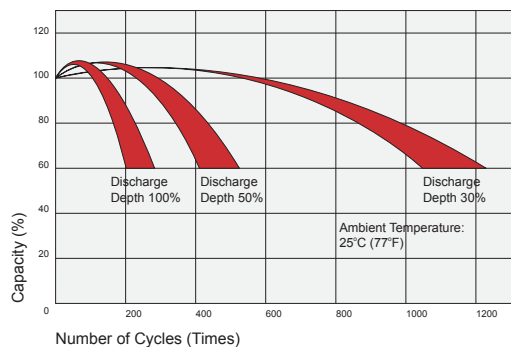
Dimensions

T2 Terminal

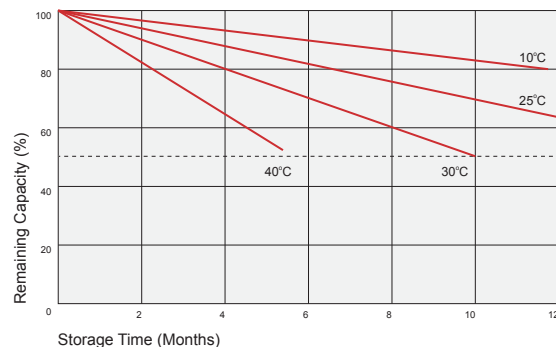
Unit: mm (inches)



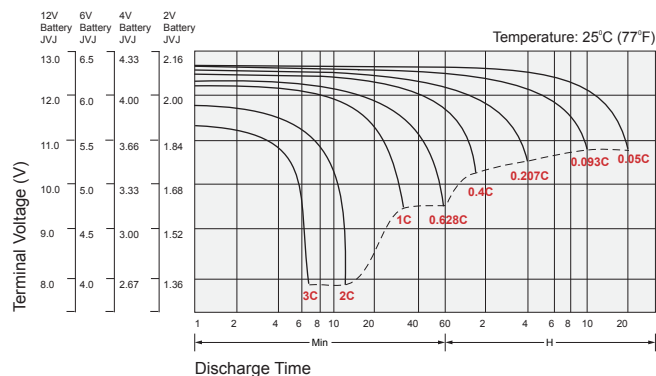
Cycle Service Life



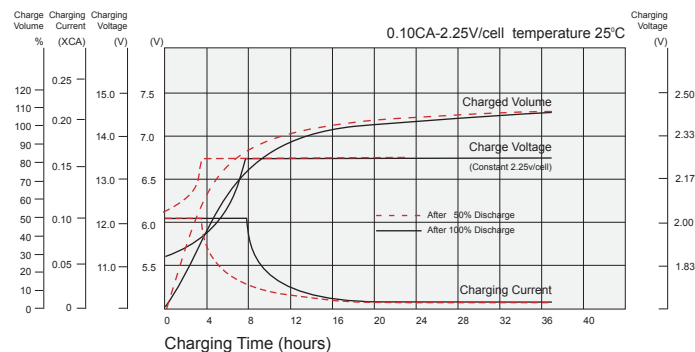
Self Discharge Characteristics



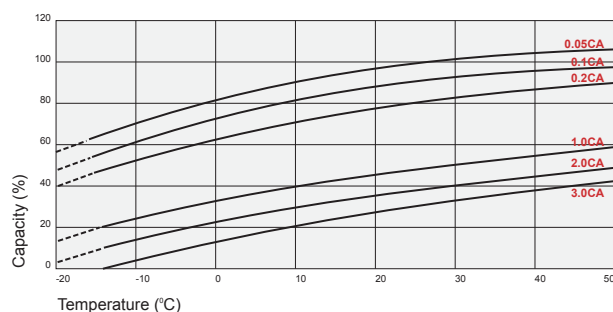
Discharge Characteristics



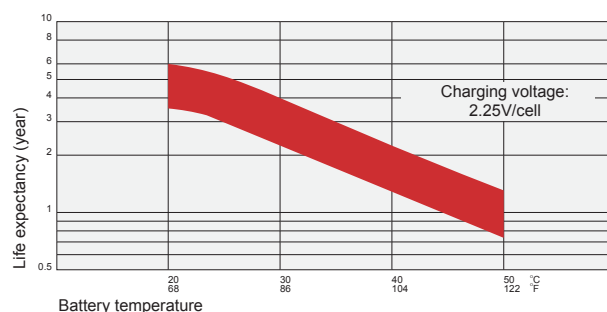
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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