

12SEC7P-F1 (12V 7Ah)

SPECIFICATIONS

Nominal Voltage (V) 12V

Nominal Capacity

20 hour rate (0.35A to 10.50V)	7Ah
10 hour rate (0.63A to 10.50V)	6.3Ah
5 hour rate (0.13A to 10.20V)	5.65Ah
1C (7A to 9.60V)	3.5Ah
3C (21A to 9.60V)	2.1Ah

Weight Approx. 2.1kg (4.62lbs)

Internal Resistance (@1kHz) Approx. 28mΩ

Maximum Discharge Current

For 5 seconds 105A

Charging Methods @25°C (77°F)

Standby Use:

Float Charging Voltage	13.50V to 13.80V
Coefficient -3.0mV/°C/Cell	
Maximum Charging Current	2.1A

Operating Temperature Range

Charge	-15°C (5°F)	to	+40°C (104°F)
Discharge	-15°C (5°F)	to	+50°C (122°F)
Storage	-15°C (5°F)	to	+40°C (104°F)

Charge Retention (Shelf Life) @20°C (68°F)

1 month	92%
3 months	90%
6 months	80%

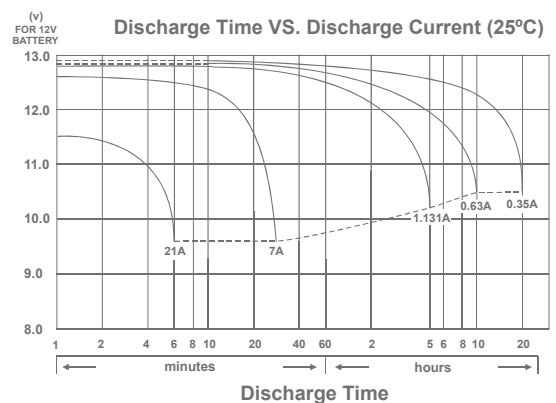
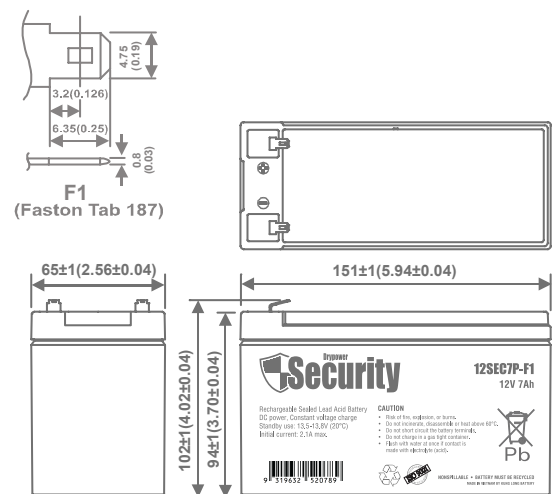
Case Material ABS UL94 HB

Terminal F1 (Faston Tab 187)

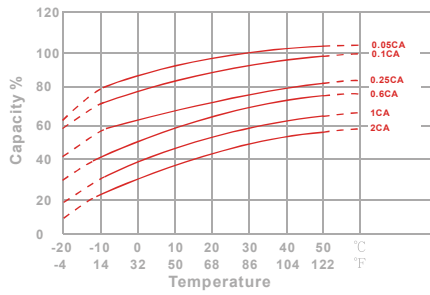


DIMENSIONS

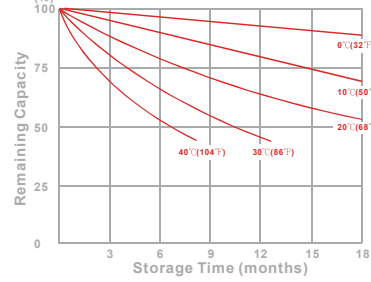
mm (inch)



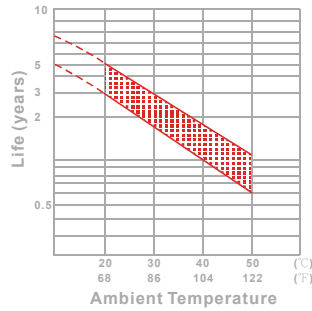
Effect of Temperature on Capacity 25°C (77°F)



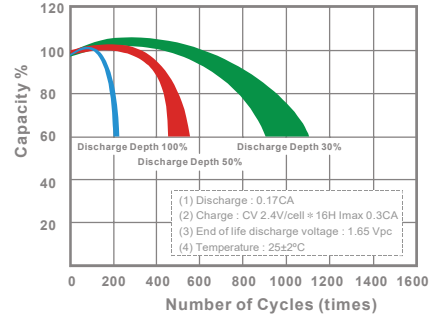
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
2	min	48.9	67.6	83.2	93.2	97.0	99.1	102
4	min	33.4	43.5	51.7	56.8	58.7	59.8	61.5
6	min	26.3	33.2	38.6	41.9	43.2	44.0	45.1
8	min	22.3	27.5	31.5	33.9	34.9	35.4	36.2
10	min	19.3	23.3	26.4	28.3	29.0	29.4	30.1
15	min	15.8	18.5	20.5	21.7	22.2	22.4	22.9
20	min	13.4	15.3	16.7	17.5	17.9	18.1	18.4
30	min	10.7	11.8	12.6	13.1	13.3	13.4	13.6
60	min	7.38	7.72	7.92	7.99	8.03	8.06	8.06
90	min	5.35	5.58	5.70	5.76	5.78	5.80	5.86
120	min	4.26	4.43	4.52	4.56	4.58	4.60	4.63
180	min	3.26	3.37	3.44	3.46	3.48	3.49	3.51
240	min	2.60	2.68	2.73	2.75	2.76	2.77	2.79
300	min	2.18	2.24	2.28	2.29	2.30	2.31	2.32
480	min	1.50	1.53	1.56	1.57	1.57	1.58	1.58
600	min	1.26	1.28	1.30	1.31	1.31	1.32	1.32
1200	min	0.686	0.695	0.702	0.706	0.708	0.710	0.711

- Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
2	min	28.2	39.0	48.0	53.8	55.9	57.2	59.0
4	min	18.5	24.2	28.7	31.5	32.6	33.2	34.2
6	min	14.5	18.3	21.3	23.1	23.8	24.2	24.8
8	min	12.2	15.0	17.2	18.5	19.0	19.3	19.8
10	min	10.5	12.7	14.4	15.4	15.8	16.1	16.4
15	min	8.33	9.72	10.8	11.4	11.7	11.8	12.0
20	min	7.00	7.97	8.70	9.15	9.32	9.43	9.60
30	min	5.47	6.03	6.44	6.70	6.80	6.87	6.97
60	min	3.72	3.89	3.99	4.03	4.05	4.06	4.06
90	min	2.69	2.81	2.87	2.90	2.91	2.92	2.95
120	min	2.14	2.22	2.27	2.29	2.30	2.31	2.33
180	min	1.63	1.69	1.72	1.73	1.74	1.75	1.76
240	min	1.30	1.34	1.36	1.37	1.38	1.38	1.39
300	min	1.08	1.12	1.13	1.14	1.15	1.15	1.16
480	min	0.745	0.762	0.773	0.778	0.781	0.784	0.787
600	min	0.623	0.636	0.644	0.649	0.651	0.653	0.656
1200	min	0.341	0.345	0.348	0.350	0.352	0.352	0.353

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)

Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.