

12NBN7P-F2 (12V 36Wh)

SPECIFICATIONS

Nominal Voltage (V) 12V

Nominal Capacity

10 min rate (219W to 9.60V)	36.5Wh
20 hour rate (0.35A to 10.50V)	7Ah
1C (7A to 9.60V)	4.43Ah
3C (21A to 9.60V)	2.8Ah

Weight Approx. 2.2kg (4.84lbs)

Internal Resistance (@1kHz) Approx. 17mΩ

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%

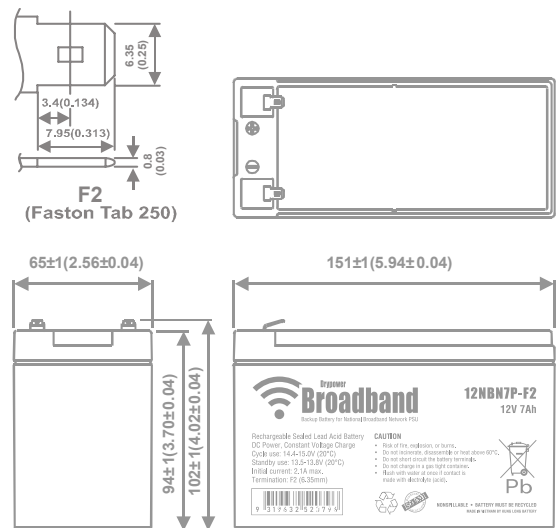
Case Material ABS

Terminal F2 (Faston Tab 250)

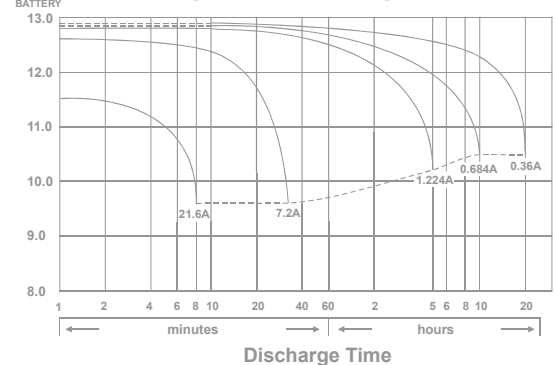


DIMENSIONS

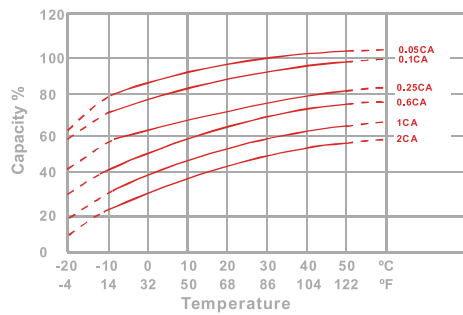
mm (inch)



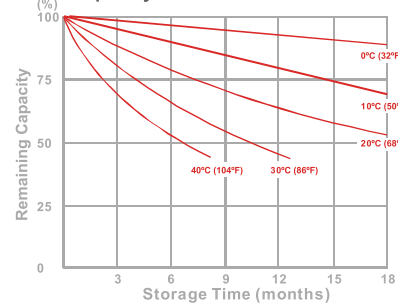
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



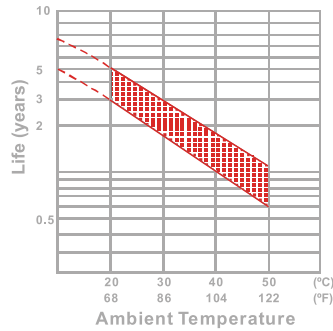
Effect of Temperature on Capacity 25°C (77°F)



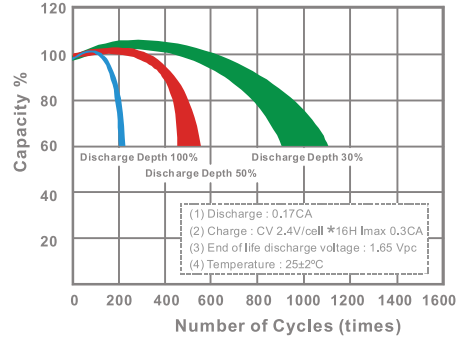
Capacity Retention Characteristic



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								
5	min	263	282	294	306	311	317	326
10	min	180	191	199	206	209	213	219
15	min	144	151	155	159	161	164	168
30	min	72.4	77.6	81.5	84.6	85.5	86.4	87.5
60	min	46.2	50.3	51.8	53.2	53.8	54.5	55.4
120	min	24.6	27.1	28.3	29.5	29.9	30.4	31.2
180	min	18.5	19.9	20.9	21.7	22.0	22.3	22.8
240	min	17.1	17.6	18.0	18.3	18.4	18.6	18.9
300	min	14.8	15.2	15.5	15.7	15.8	15.9	16.1
600	min	8.16	8.39	8.51	8.59	8.62	8.66	8.72
1200	min	4.14	4.23	4.31	4.37	4.39	4.42	4.46

- 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								
5	min	23.1	26.2	27.8	29.1	29.6	30.5	31.7
10	min	16.1	17.3	18.1	18.6	18.9	19.2	19.8
15	min	12.6	13.1	13.5	13.8	14.0	14.1	14.3
30	min	6.54	7.05	7.28	7.47	7.56	7.68	7.85
60	min	4.02	4.25	4.41	4.52	4.58	4.63	4.71
120	min	2.26	2.38	2.45	2.49	2.51	2.54	2.57
180	min	1.65	1.74	1.79	1.82	1.83	1.85	1.88
240	min	1.39	1.44	1.48	1.51	1.53	1.55	1.57
300	min	1.13	1.19	1.24	1.28	1.30	1.31	1.32
600	min	0.667	0.675	0.682	0.687	0.690	0.694	0.699
1200	min	0.339	0.346	0.350	0.353	0.355	0.357	0.359

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

The tolerance range : X<6min(+15%~-15%), 6min ≤ X<10min(+12%~-12%), 10min ≤ X < 60min(+8%~-8%), X ≥ 60min(+5%~-5%)