



VTM 7.5A-12

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.375A to 10.50V)	7.5Ah
10 hour rate	(0.713A to 10.50V)	7.125Ah
5 hour rate	(1.275A to 10.20V)	6.375Ah
1 C	(7.5A to 9.60V)	4.25Ah
3 C	(22.5A to 9.60V)	3Ah

Weight Approx. 2.3kg(5.06Lbs.)

Internal Resistance (at 1KHz) Approx. 19 mΩ

Maximum Discharge Current for 5 seconds: 112.5A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	2.25A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient	-3.0mV/°C/cell

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)

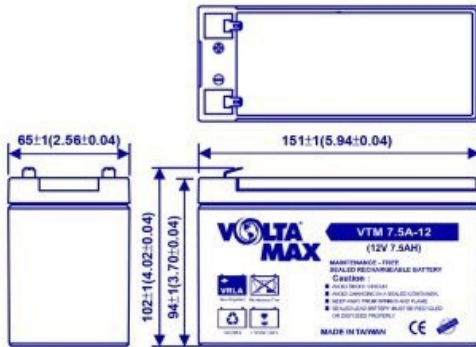
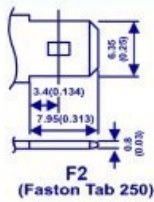
Charge Retention (shelf life) at 20°C(68°F)

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

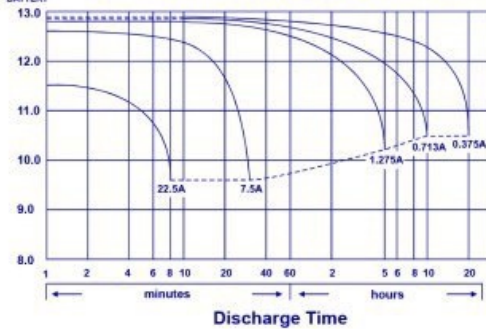
Case Material ABS UL94 HB

Terminal F2 (Faston Tab 250)

Dimensions mm(inch)



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



- 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	45.0	49.6	53.0	55.9	57.0	58.0	60.5
10	min	33.5	36.7	38.6	38.9	39.4	39.6	40.8
15	min	25.0	27.0	28.5	29.5	29.8	30.1	30.6
30	min	15.7	16.5	17.0	17.5	17.7	17.9	18.1
60	min	9.92	10.2	10.4	10.6	10.6	10.6	10.8
120	min	5.37	5.54	5.65	5.75	5.77	5.83	5.89
180	min	3.82	3.94	4.04	4.13	4.17	4.22	4.26
240	min	2.96	3.09	3.18	3.23	3.25	3.28	3.32
300	min	2.47	2.56	2.65	2.72	2.75	2.77	2.79
600	min	1.38	1.44	1.52	1.54	1.54	1.55	1.57
1200	min	0.728	0.760	0.800	0.808	0.811	0.817	0.826

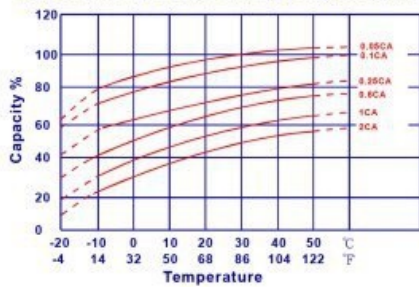
- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	24.8	27.7	30.1	32.2	33.0	33.8	35.6
10	min	17.5	19.2	20.4	20.8	21.0	21.3	22.0
15	min	14.2	15.1	15.6	15.9	16.0	16.2	16.5
30	min	8.61	8.92	9.14	9.30	9.38	9.45	9.61
60	min	4.96	5.11	5.23	5.34	5.37	5.40	5.46
120	min	2.62	2.71	2.78	2.84	2.86	2.89	2.92
180	min	1.83	1.89	1.95	2.00	2.02	2.04	2.07
240	min	1.42	1.49	1.54	1.57	1.58	1.59	1.61
300	min	1.19	1.24	1.31	1.33	1.34	1.35	1.36
600	min	0.654	0.683	0.724	0.732	0.736	0.741	0.751
1200	min	0.339	0.355	0.375	0.380	0.382	0.385	0.390

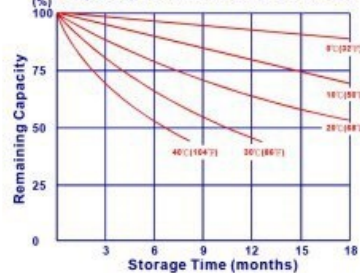
All data on the spec. sheet is an average value:

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%)

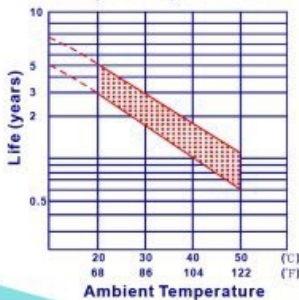
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

