

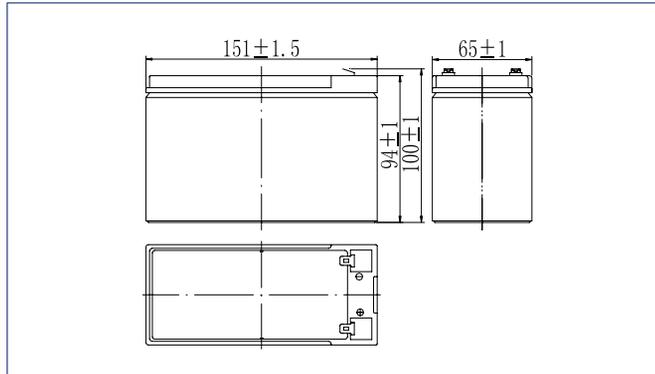
12V
9AH

viotech
battery

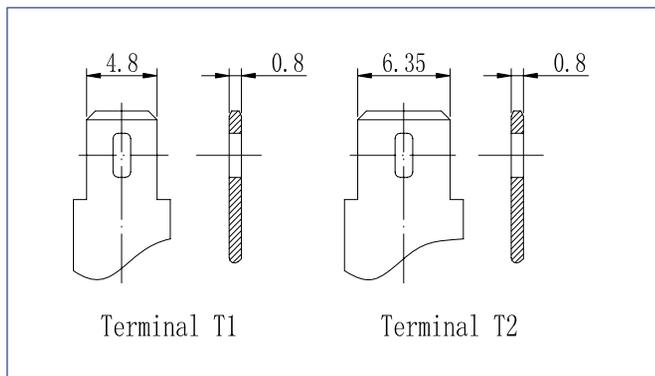
SPECIFICATIONS

Model	VT9-12	
Nominal Voltage	12V	
Rated capacity (20 hour rate)	9Ah	
Dimensions	Length	151± 1.5mm(5.94inch)
	Width	65± 1mm(2.56inch)
	Height	94± 1mm(3.70inch)
	Total Height	100± 1mm(3.94inch)
Approx. Weight	2.60kg(5.72lbs)± 5%	

OUTER DIMENSIONS (MM)



TERMINAL TYPE (MM)



CHARACTERISTICS

Capacity (25 °C)	20HR(10.5V)	9Ah
	10HR(10.5V)	8.4Ah
	1HR(9.60V)	5.8Ah
Terminal type		T1/T2
Internal resistance (Fully charged,25 °C)		Approx.19m Ω
Capacity affected by temperature (20HR)	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Self-discharge (25 °C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C± 3°C(77°F± 5°F)
Operating temperature range	Discharge	-15°C~50°C(5°F~122°F)
	Charge	-10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		2.7A
Terminal material		Copper
Maximum discharge current		135A(5 sec.)
Designed floating life(20°C)		10 years

CONSTANT CURRENT DISCHARGE CHARACTERISTICS UNIT: A (25°C)

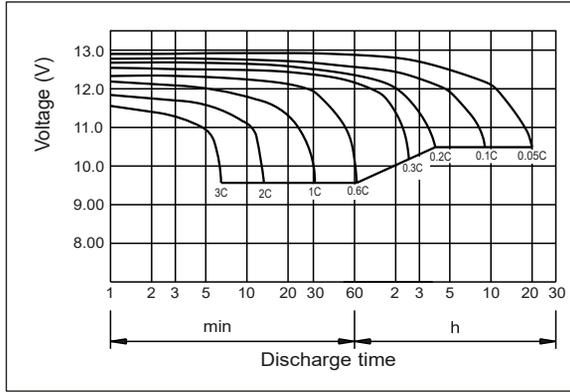
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	33.6	21.6	17.1	9.54	5.85	3.19	2.29	1.83	1.57	1.02	0.86	0.45
9.90V	32.5	20.9	16.7	9.35	5.76	3.18	2.28	1.83	1.55	1.00	0.84	0.45
10.2V	31.2	20.0	16.1	9.06	5.62	3.15	2.26	1.81	1.54	1.00	0.84	0.45
10.5V	30.0	19.2	15.5	8.84	5.50	3.11	2.25	1.80	1.52	1.00	0.84	0.45
10.8V	28.8	18.1	14.7	8.52	5.34	3.02	2.18	1.74	1.48	0.97	0.83	0.44

CONSTANT POWER DISCHARGE CHARACTERISTICS UNIT: W (25°C)

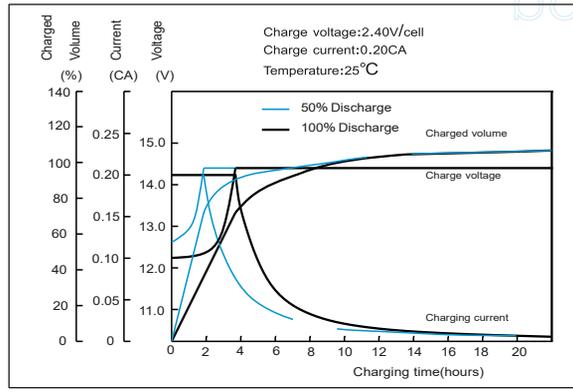
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	380	244	195	109	67.8	37.5	27.3	21.9	18.6	12.1	10.2	5.49
9.90V	369	237	190	107	66.8	37.2	27.1	21.8	18.6	12.1	10.2	5.46
10.2V	352	226	183	104	65.0	36.9	26.9	21.6	18.4	12.0	10.1	5.43
10.5V	338	216	177	101	63.7	36.3	26.7	21.5	18.3	11.8	10.0	5.40
10.8V	326	205	168	97.7	61.8	35.4	26.0	20.8	17.7	11.5	9.84	5.30

Note: The above characteristics data can be obtained within three charge/discharge cycles

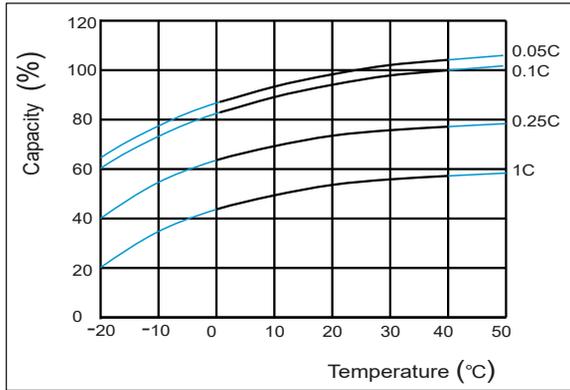
DISCHARGE CHARACTERISTICS (25°C)



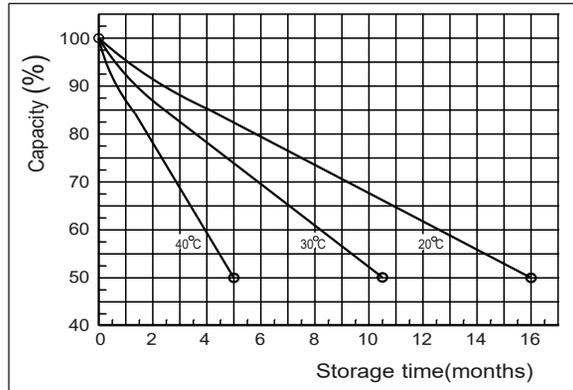
CHARGING CHARACTERISTICS (25°C)



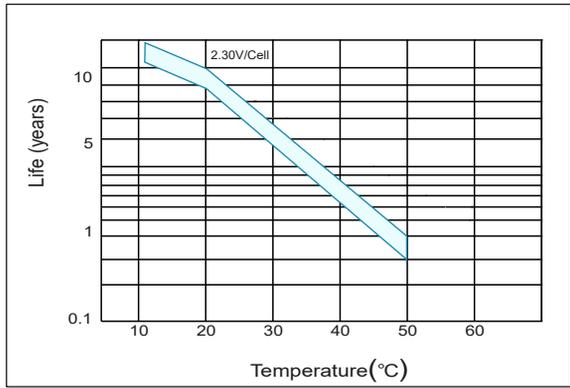
TEMPERATURE EFFECTS ON CAPACITY



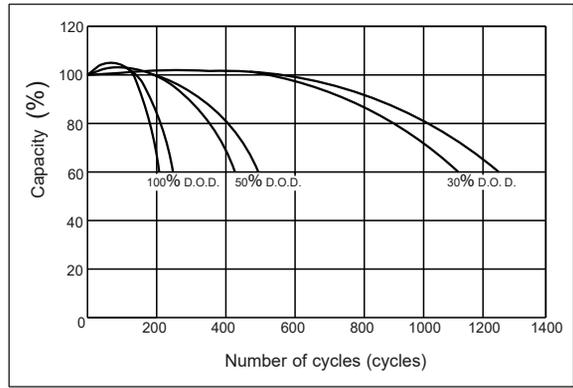
SELF-DISCHARGE CHARACTERISTICS



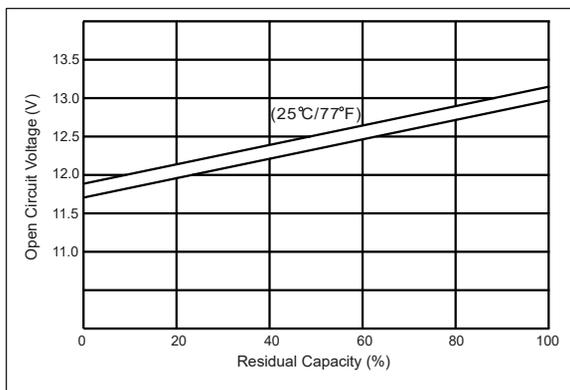
FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D (25°C)



THE RELATIONSHIP FOR OCV AND CAPACITY (25°C)



THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE

