

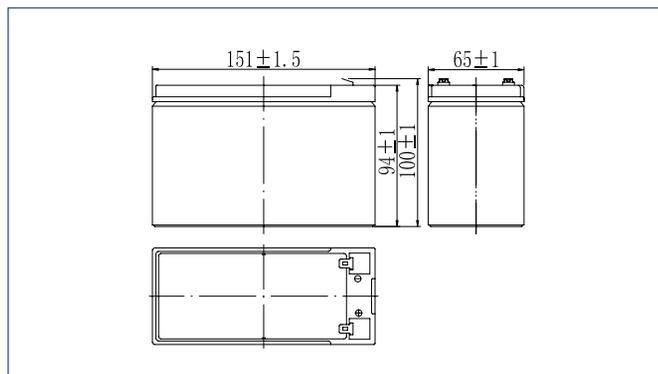
12V
9AH

viotech
battery

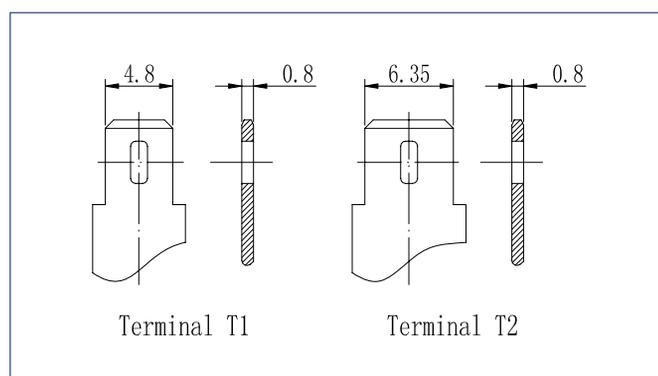
SPECIFICATIONS

Model	VTE9-12	
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	2.30kg(5.06lbs)± 5%	

OUTER DIMENSIONS (MM)



TERMINAL TYPE (MM)



viotech
battery

CHARACTERISTICS

Capacity (25 °C)	20HR(10.5V)	9Ah
	10HR(10.5V)	8.2Ah
	1HR(9.60V)	5.6Ah
Terminal type		T1/T2
Internal resistance (Fully charged,25 °C)		Approx.28m 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)

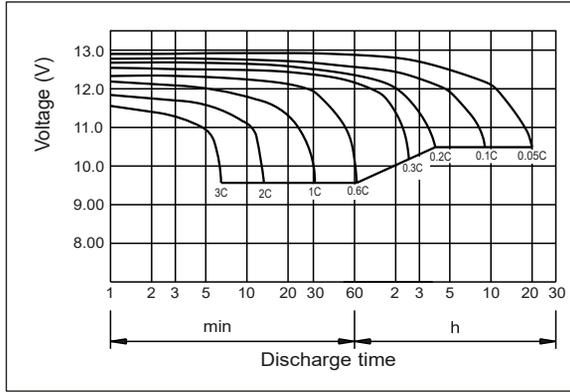
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	32.1	20.3	16.2	9.06	5.62	3.07	2.23	1.78	1.51	0.99	0.83	0.46
9.90V	31.2	19.7	15.9	8.88	5.53	3.05	2.21	1.78	1.50	0.99	0.83	0.45
10.2V	29.9	18.9	15.3	8.61	5.40	3.02	2.20	1.76	1.49	0.98	0.82	0.45
10.5V	28.6	18.0	14.7	8.40	5.28	2.98	2.18	1.75	1.48	0.98	0.82	0.45
10.8V	27.0	17.0	14.0	8.09	5.13	2.90	2.11	1.70	1.44	0.93	0.80	0.44

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

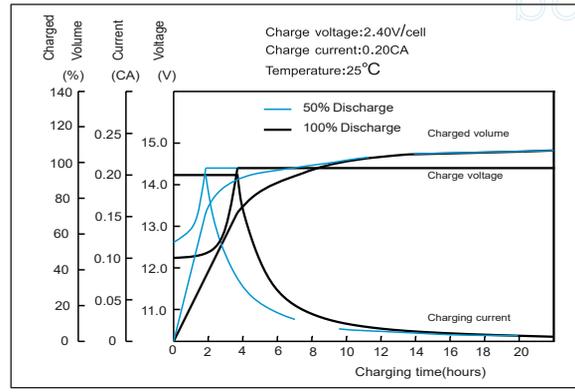
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	357	229	185	104	65.1	36.0	26.5	21.2	18.0	14.10	10.1	5.43
9.90V	347	223	181	102	64.1	35.7	26.3	21.1	18.0	14.10	10.1	5.42
10.2V	331	212	174	98.8	62.4	35.4	26.1	21.0	17.8	14.00	10.0	5.37
10.5V	318	203	168	96.0	61.2	34.8	25.9	20.9	17.8	13.65	9.9	5.33
10.8V	306	193	160	92.8	59.3	34.0	25.2	20.2	17.2	13.20	9.74	5.20

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

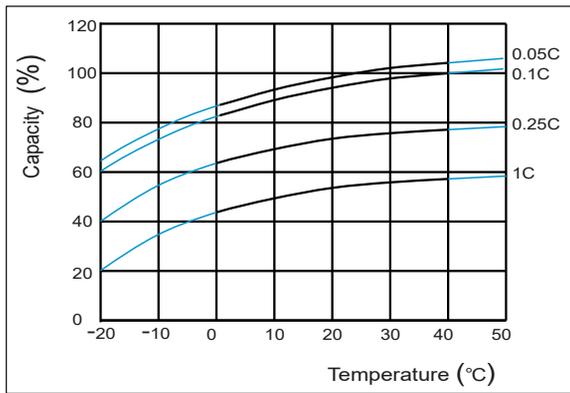
DISCHARGE CHARACTERISTICS (25°C)



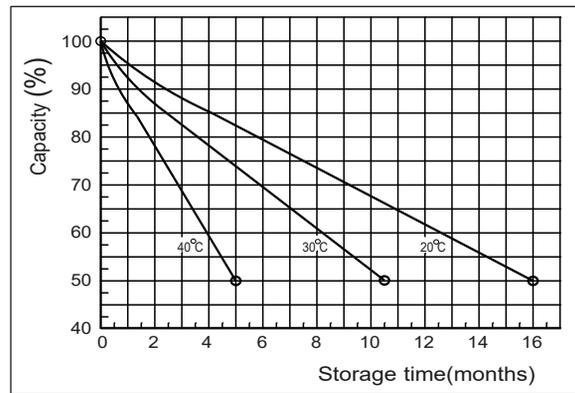
CHARGING CHARACTERISTICS (25°C)



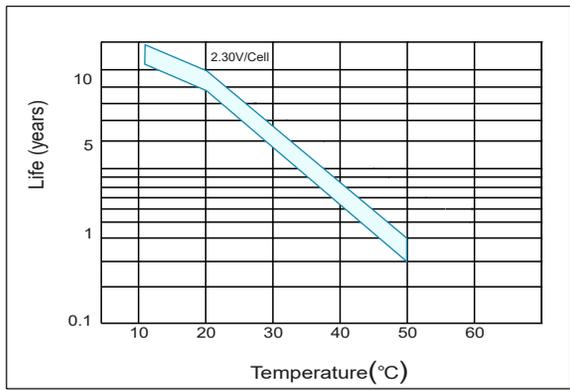
TEMPERATURE EFFECTS ON CAPACITY



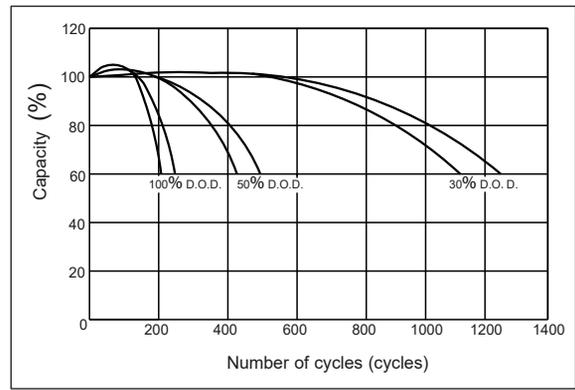
SELF-DISCHARGE CHARACTERISTICS



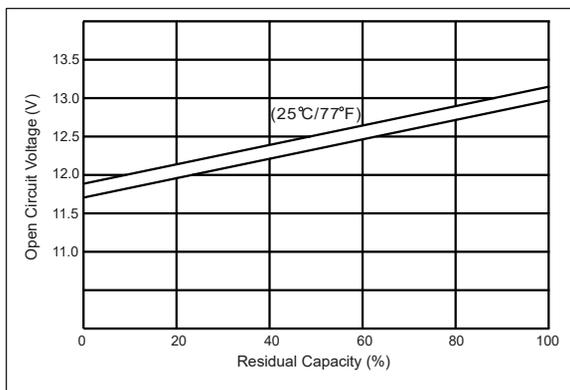
FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D (25°C)



THE RELATIONSHIP FOR OCV AND CAPACITY (25°C)



THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE

