

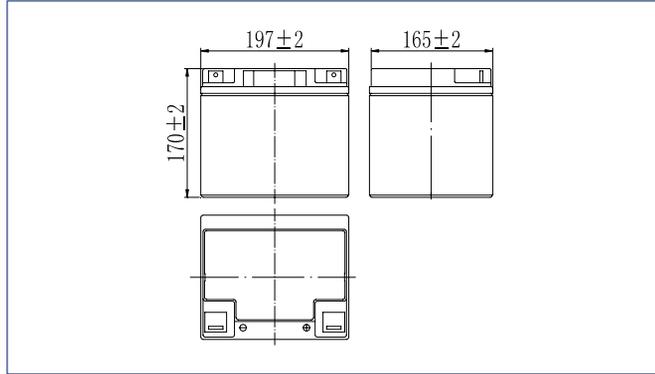
12V  
40AH

viotech  
battery

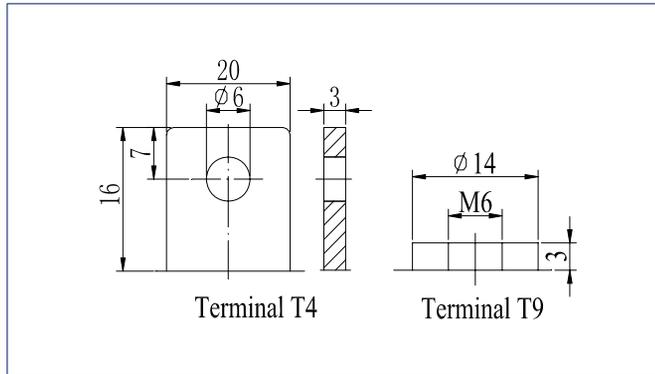
## SPECIFICATIONS

Model	VT40-12	
Nominal Voltage	12V	
Rated capacity (20 hour rate)	40Ah	
Dimensions	Length	197±2mm(57.76inch)
	Width	165±2mm(6.50inch)
	Height	170±2mm(6.69inch)
	Total Height	170±2mm(6.69inch)
Approx. Weight	12.5kg(275lbs)±4%	

## OUTER DIEMENSIONS (MM)



## TERMINAL TYPE (MM)



## CHARACTERISTICS

Capacity (25 °C)	10HR(10.8V)	40Ah
	5HR(10.5V)	35Ah
	1HR(9.60V)	24.8Ah
Terminal type		T4/T9
Internal resistance (Fully charged,25 °C)		Approx.8.5m 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°C± 5°C)
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)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		12A
Terminal material		Copper
Maximum discharge current		400A(5 sec.)
Designed floating life(20°C)		12 years

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

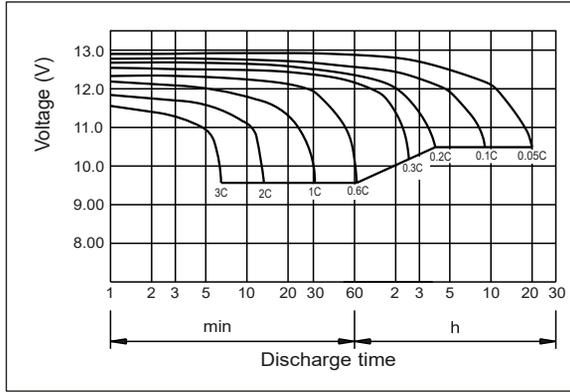
FV/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	136	84.0	66.0	40.0	24.8	14.6	10.2	8.36	7.14	4.90	4.07	2.14
9.90V	133	81.5	64.4	39.2	24.4	14.5	10.1	8.31	7.10	4.87	4.06	2.13
10.2V	127	78.1	62.0	38.0	23.8	14.4	10.1	8.26	7.05	4.83	4.05	2.13
10.5V	122	74.8	59.9	37.1	23.3	14.2	10.0	8.20	7.00	4.80	4.03	2.11
10.8V	115	70.6	56.8	35.7	22.6	13.8	9.70	2.10	6.79	4.66	4.00	2.10

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

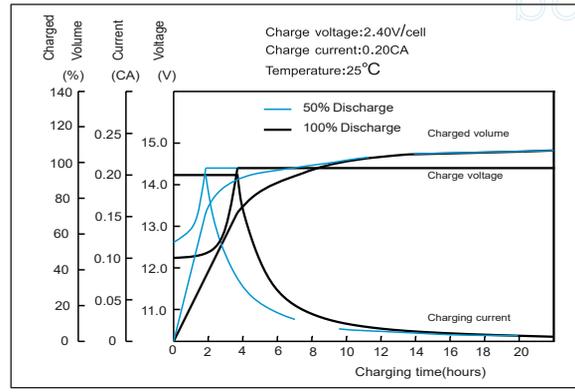
FV/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1469	907	725	449	283	169	120	98.4	87.4	58.2	48.6	25.7
9.90V	1436	880	707	440	278	168	119	97.8	83.9	57.8	48.5	25.6
10.2V	1372	844	681	426	271	167	118	97.1	83.3	57.4	48.4	25.5
10.5V	1318	807	658	416	266	164	118	96.4	82.7	57.0	48.1	25.4
10.8V	1242	762	623	401	258	160	114	93.5	80.3	55.3	47.8	25.2

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

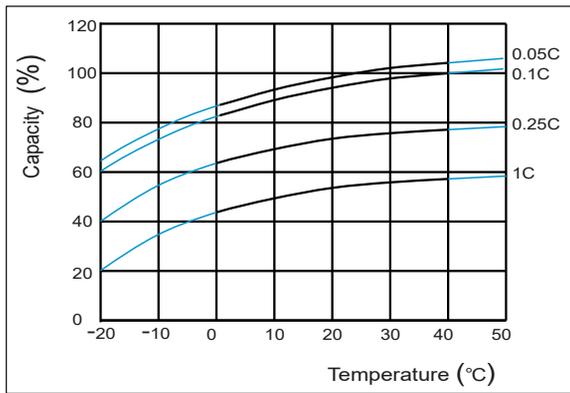
### DISCHARGE CHARACTERISTICS (25°C)



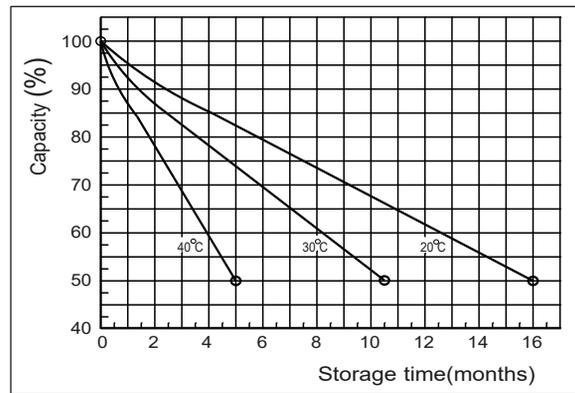
### CHARGING CHARACTERISTICS (25°C)



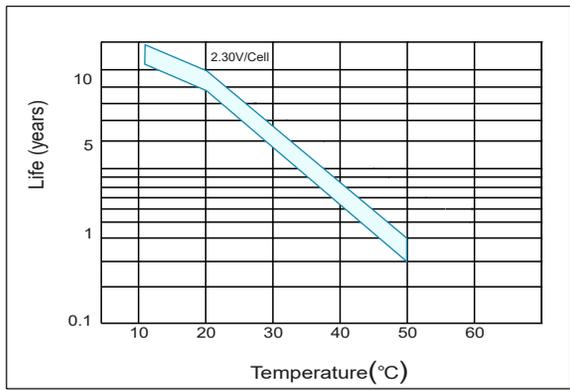
### TEMPERATURE EFFECTS ON CAPACITY



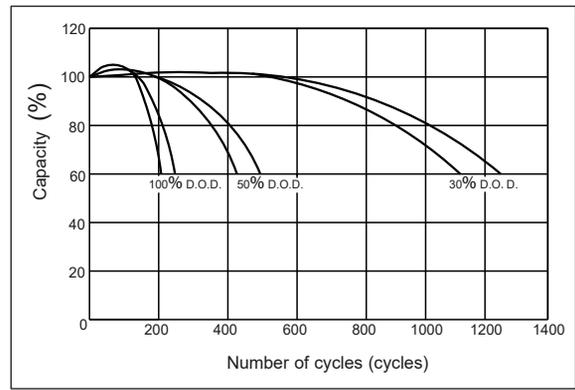
### SELF-DISCHARGE CHARACTERISTICS



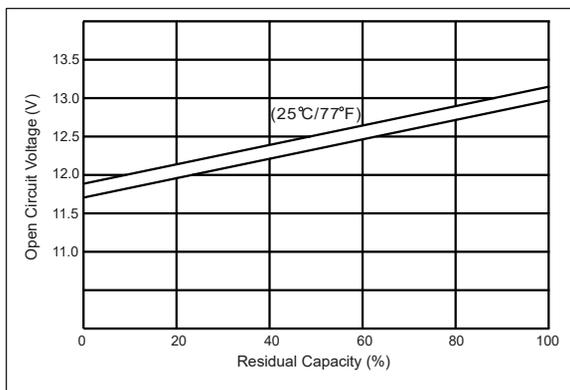
### FLOATING LIFE ON TEMPERATURE



### CYCLE LIFE ON D.O.D (25°C)



### THE RELATIONSHIP FOR OCV AND CAPACITY (25°C)



### THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE

