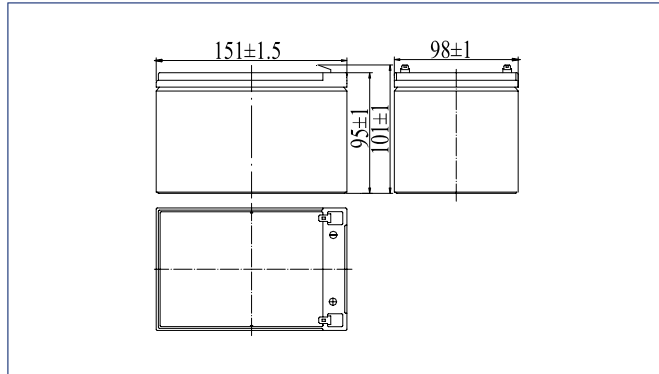


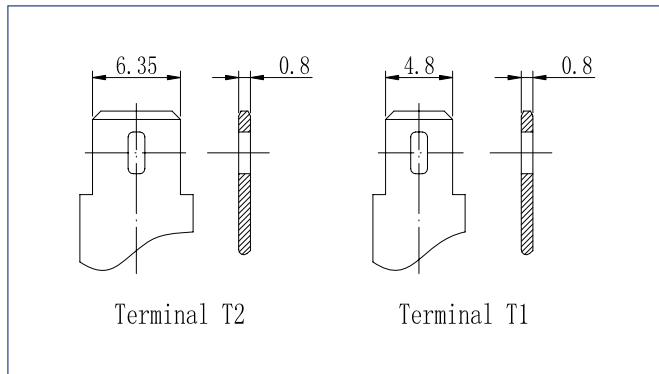
SPECIFICATIONS

Model	VT12-12	
Nominal Voltage	12V	
Rated capacity (20 hour rate)	12Ah	
Dimensions	Length	151±1.5mm(5.94inch)
	Width	98±1mm(3.86inch)
	Height	95±1mm(3.74inch)
	Total Height	101±1mm(3.98inch)
Approx. Weight	3.1kg(6.82lbs)±5%	

OUTER DIMENSIONS (MM)



TERMINAL TYPE (MM)



CHARACTERISTICS

Capacity (25 °C)	20HR(10.5V)	12Ah
	10HR(10.8V)	10Ah
	1HR(9.60V)	7.0Ah
Terminal type		T2/T1
Internal resistance (Fully charged, 25 °C)		Approx. 30m 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)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		3.6A
Terminal material		Copper
Maximum discharge current		180A(5 sec.)
Designed floating life(20°C)		10 years

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

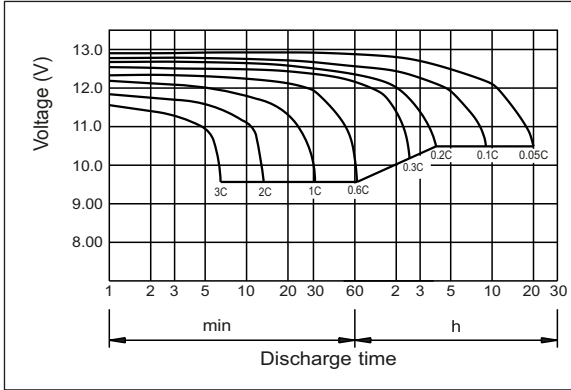
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	39.4	25.6	20.5	11.4	7.02	3.83	2.75	2.21	1.87	1.21	1.02	0.55
9.90V	38.7	24.9	20.0	11.3	6.91	3.82	2.75	2.20	1.85	1.21	1.02	0.55
10.2V	36.8	25.9	19.4	10.9	6.74	3.78	2.72	2.17	1.85	1.20	1.02	0.54
10.5V	35.4	22.9	18.7	10.6	6.61	3.73	2.70	2.16	1.84	1.19	1.01	0.54
10.8V	33.9	21.5	17.6	10.3	6.41	3.63	2.63	2.10	1.78	1.15	0.98	0.53

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

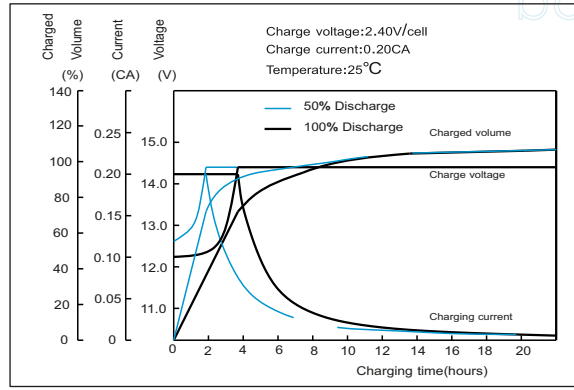
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	385	253	195	109	67.8	37.4	27.3	21.9	18.6	12.2	10.2	5.48
9.90V	379	247	190	107	66.7	37.2	27.1	21.8	18.5	12.1	10.2	5.46
10.2V	363	238	184	104	65.1	36.9	26.9	21.6	18.4	12.0	10.1	5.44
10.5V	350	229	177	102	63.7	36.3	26.7	21.4	18.3	11.9	10.1	5.40
10.8V	337	216	167	97.2	61.7	35.4	25.9	20.8	17.7	11.5	9.81	5.29

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

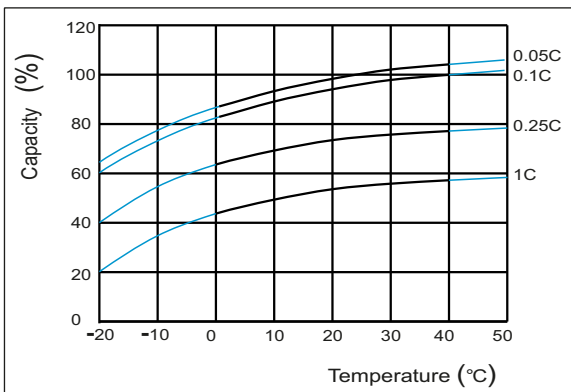
DISCHARGE CHARACTERISTICS (25°C)



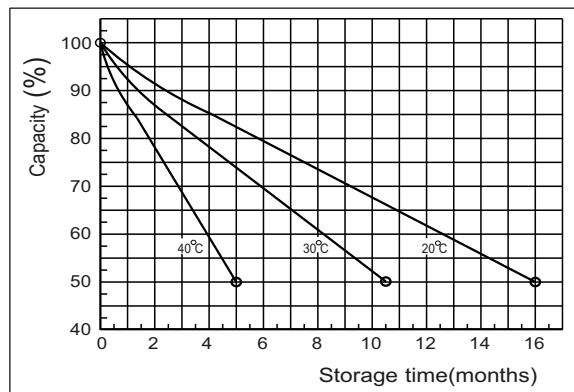
CHARGING CHARACTERISTICS (25°C)



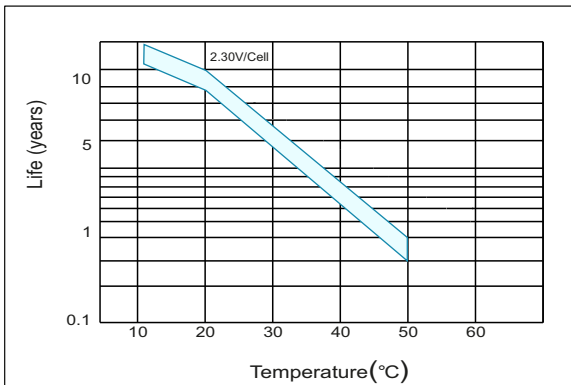
TEMPERATURE EFFECTS ON CAPACITY



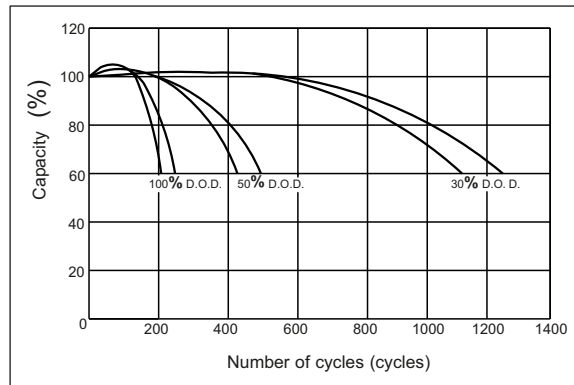
SELF-DISCHARGE CHARACTERISTICS



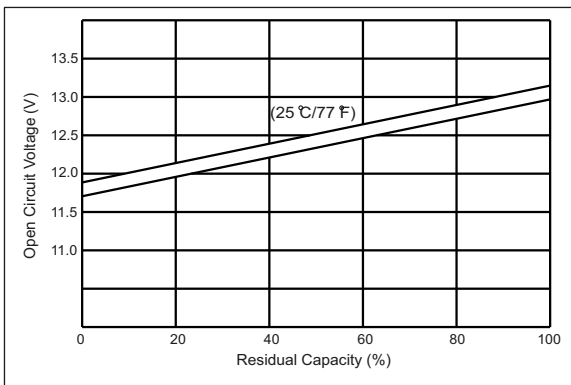
FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D (25°C)



THE RELATIONSHIP FOR OCV AND CAPACITY (25°C)



THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE

