

HR12120W

High Rate Series Battery

General Features



High rate Series VRLA batteries are designed with low internal resistance AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for High rate UPS and power backup system. High rate series Batteries are the special design batteries with 10 years floating design life at 25°C.

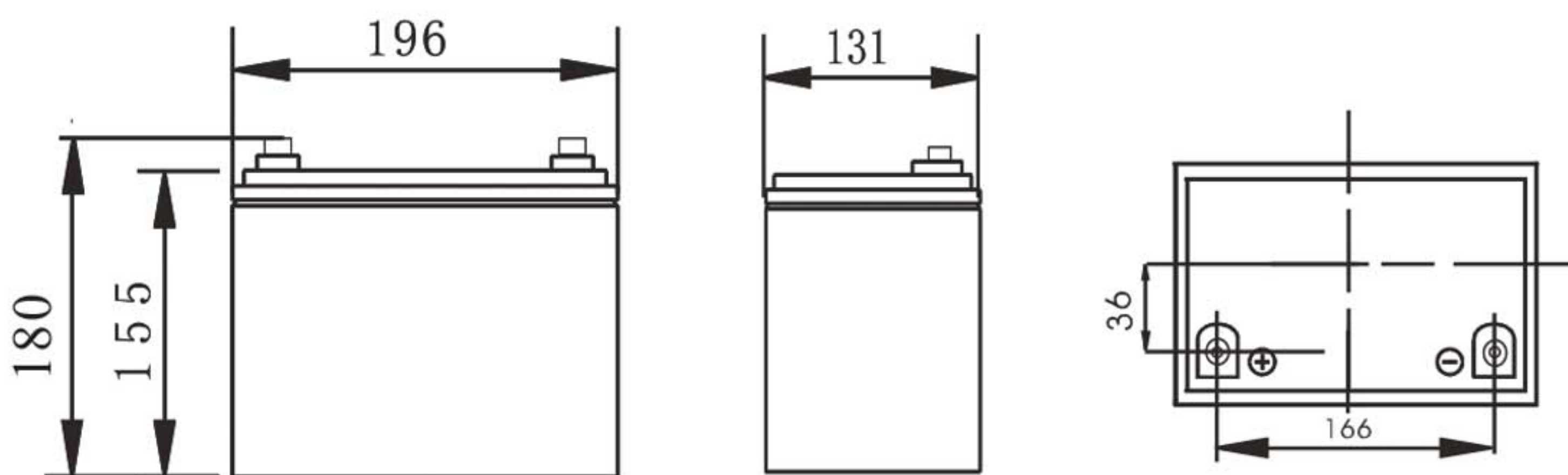
- Safety Sealing
- Non-spillable construction
- High Reliability and Stability
- Sealed and Maintenance-free
- Safety and Quality certification
- Long Life and low self-discharge design
- 30% increased power output

Container: ABS(UL94-HB) & Flame Retardant of UL94-V0 can be available upon request

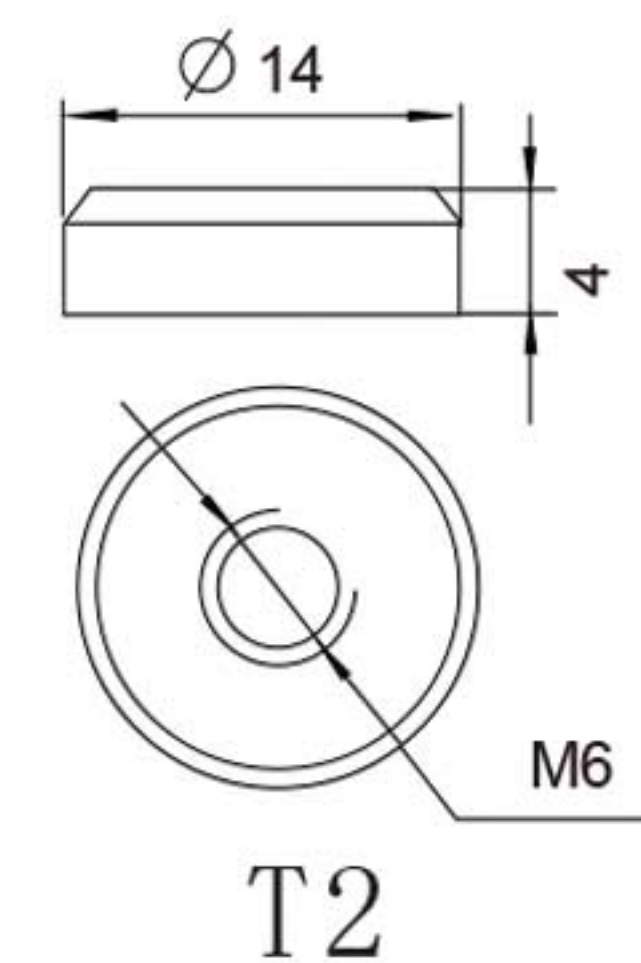
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		33Ah	
	Capacity(15 minutes rate to 1.67V/Cell)		120W	
Dimensions	Lenght	With	Height	Total Height
	196mm (7.72inches)	131mm (5.16inches)	155mm (6.10 inches)	180 mm (7.09inches)
Aprox Weight	9.55kg (21.01lbs) ± 3%			
Max. discharge current	330A (5Sec.)			
Internal Resistance	Full charged at 25°C: Approx 7.4mΩ			
Capacity affected by Temp. (10HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge at 25°C (77°F)	After 3 month storage		After 6 month storage	After 12 month storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	14.4-14.7V (Initial charging current less than 9.9A)		13.50-13.80V	

Outer Dimensions (mm)



Terminal Type (mm)



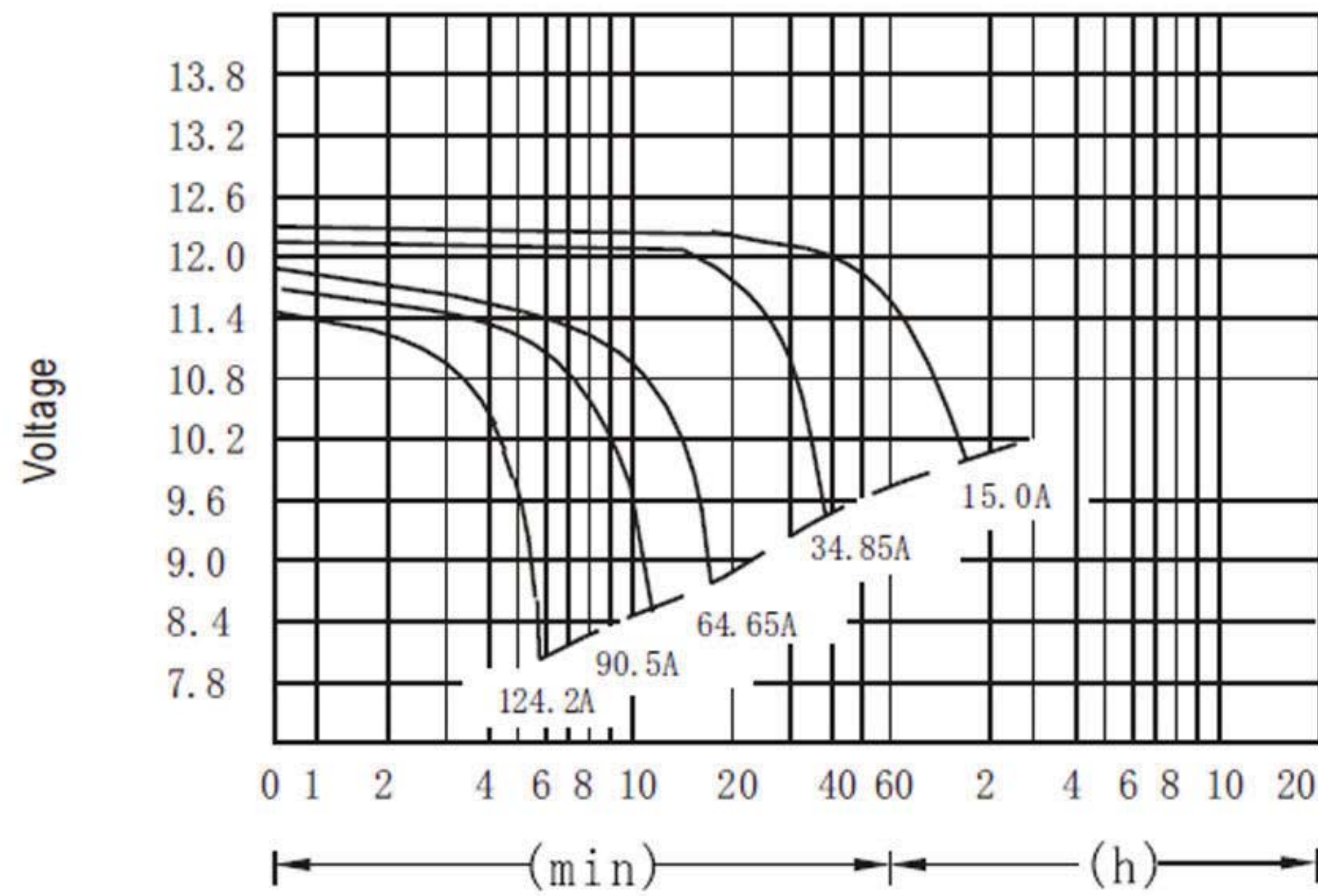
Constant Power(Watt) Discharge at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min
1.60V	231.57	154.14	128.70	93.62	74.90	57.15	44.49	32.32
1.67V	207.88	144.34	120.01	92.30	73.31	55.87	44.16	31.07
1.70V	188.30	139.64	116.15	91.25	72.02	55.73	43.17	30.98
1.75V	171.72	131.74	111.64	90.64	71.53	55.07	42.76	30.78
1.80V	153.64	122.82	107.37	80.56	69.87	54.78	42.55	30.61
1.85V	135.68	114.81	112.12	75.87	67.89	54.67	41.71	30.37

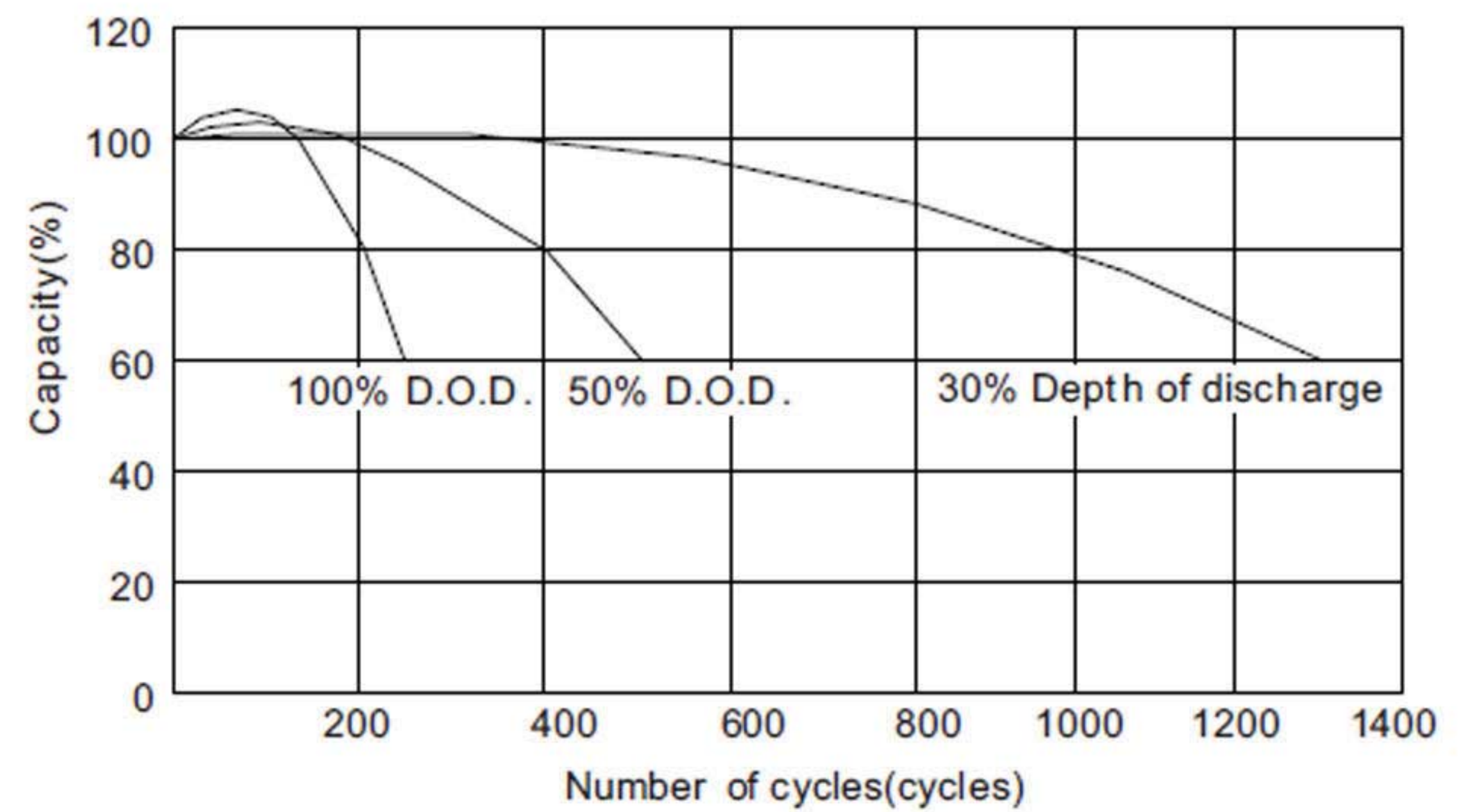
Constant Current(Amp) Discharge

F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min
1.60V	118.80	78.66	59.50	49.15	36.96	36.06	21.00	15.37
1.67V	105.47	73.41	56.41	46.47	36.17	35.82	20.85	15.22
1.70V	99.84	70.78	55.02	45.21	35.85	34.73	20.70	15.20
1.75V	90.36	66.61	52.70	42.83	35.22	34.54	20.39	15.00
1.80V	80.73	62.13	50.54	40.07	34.43	34.33	20.24	14.90
1.85V	71.10	57.65	47.91	37.31	33.49	33.15	19.93	14.73

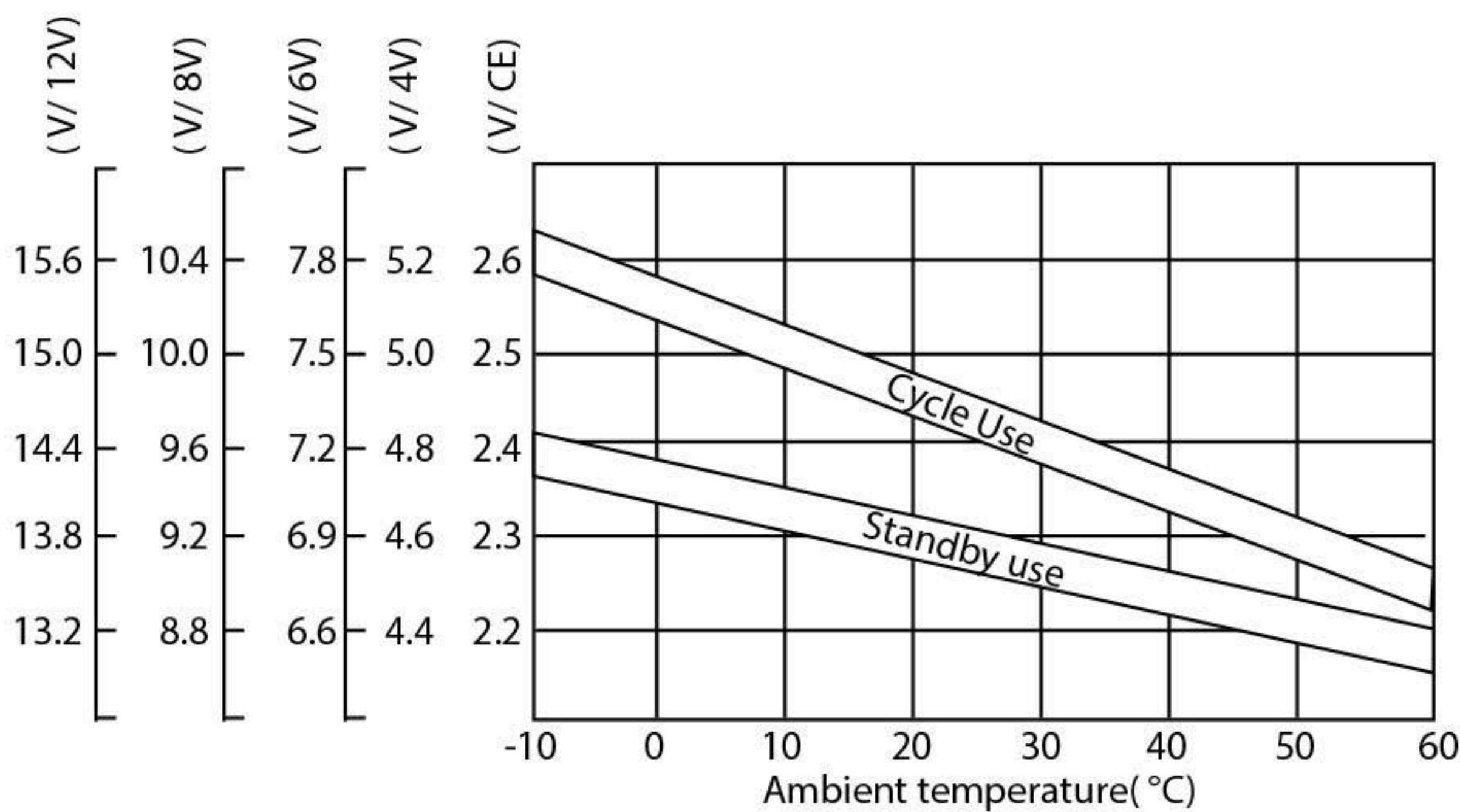
Discharge characteristic Curve



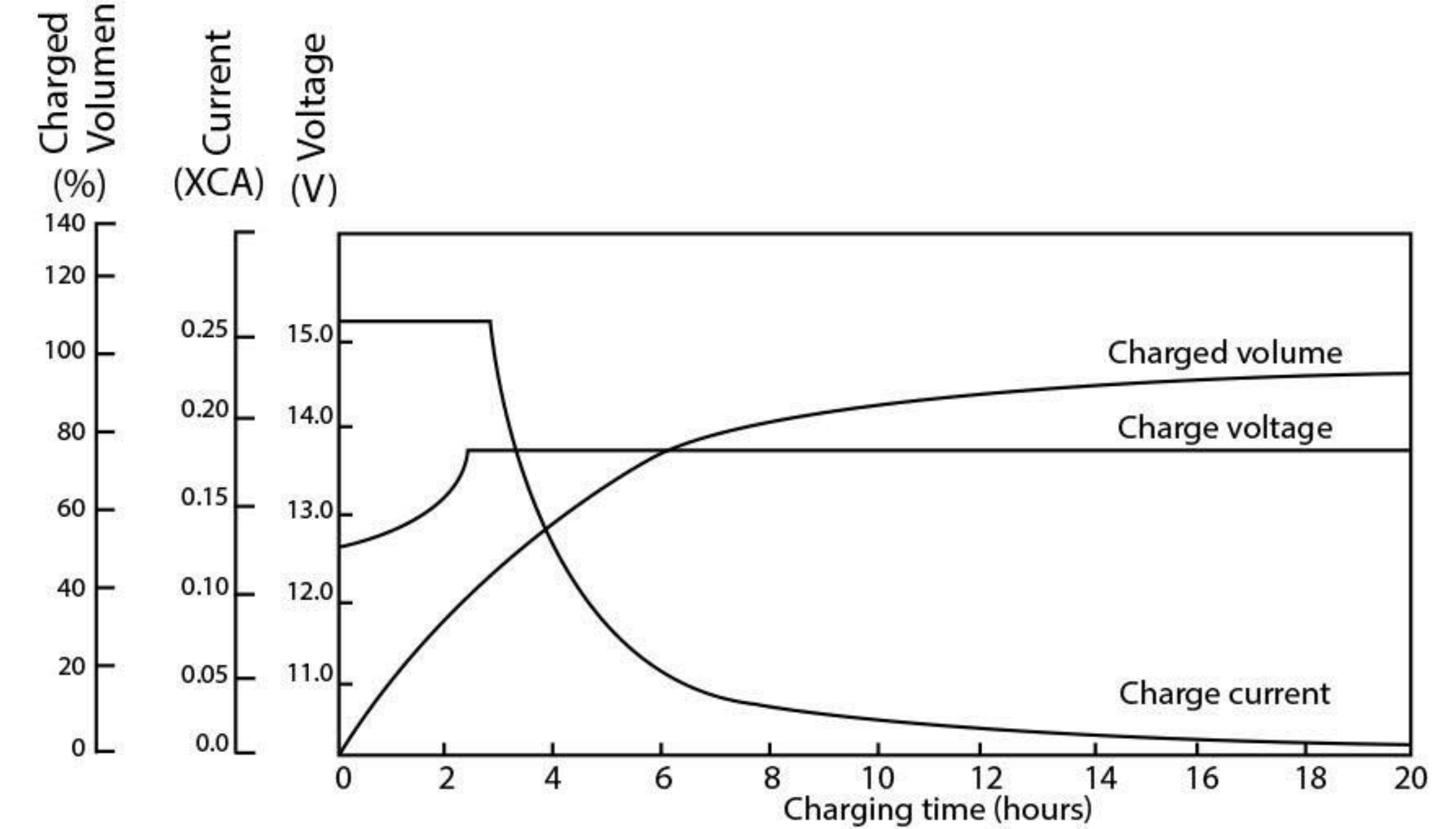
Cycle service life in relation to depth of discharge



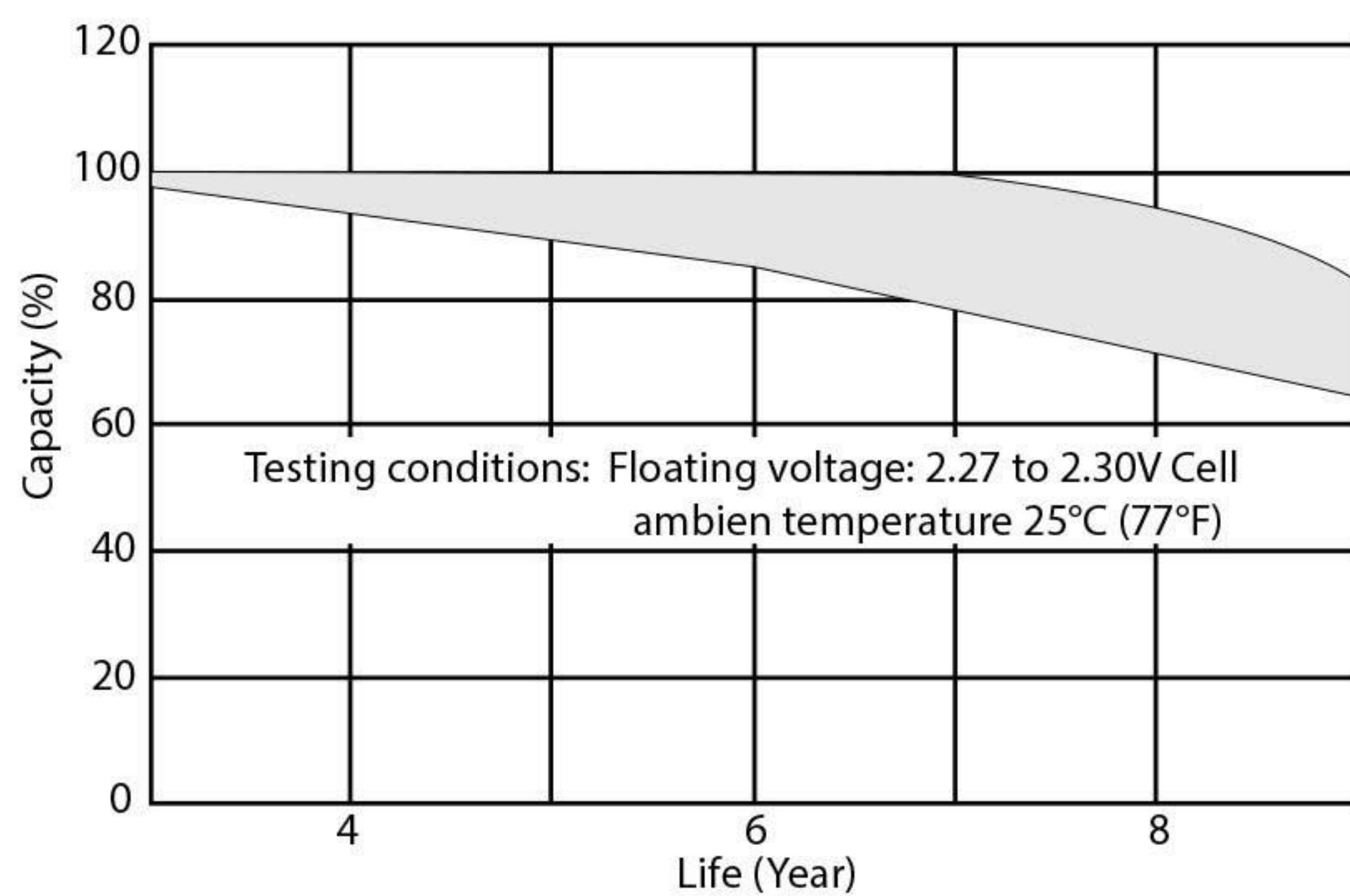
Relationship between charging voltage and temperature



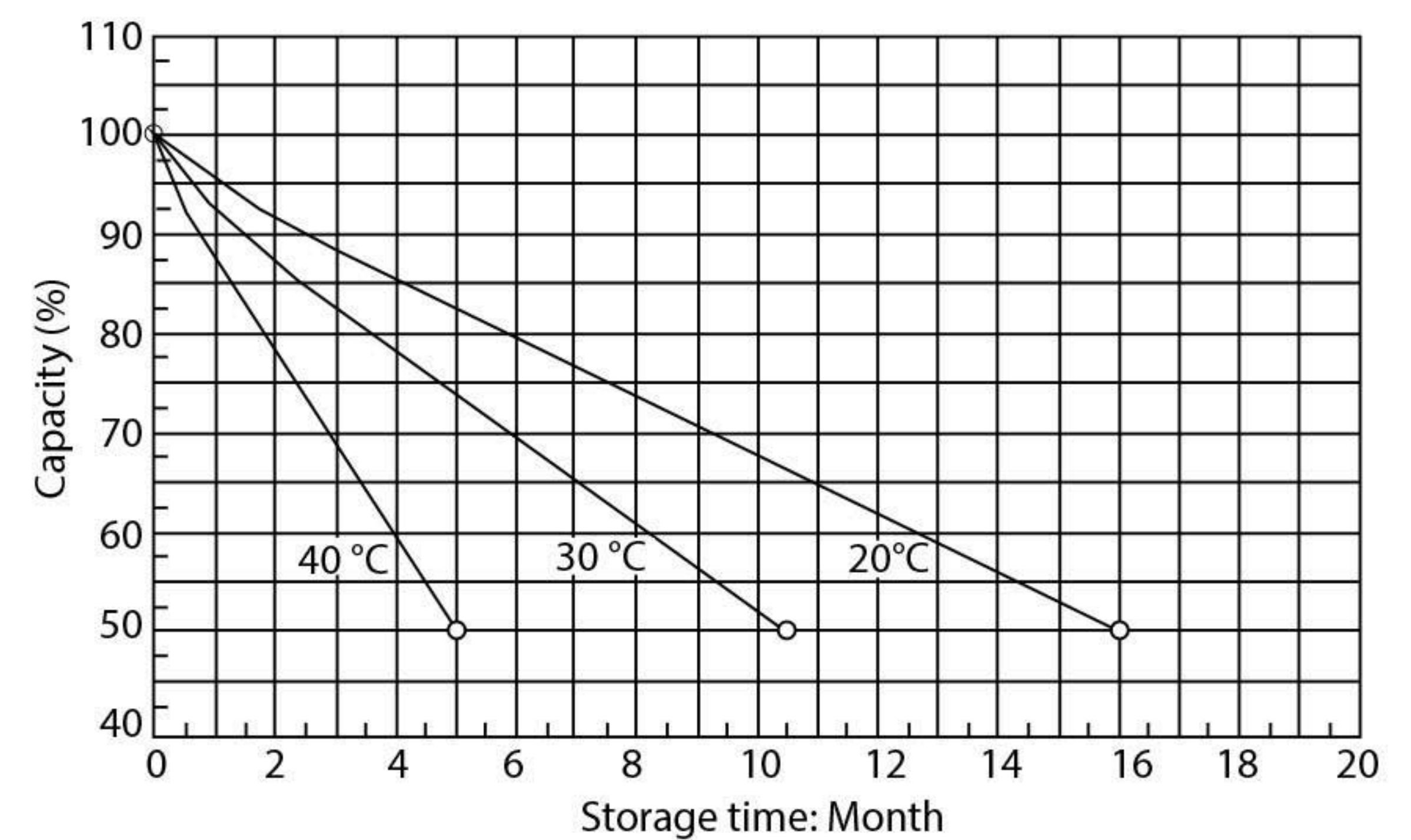
Constant voltage charging characteristic (0.25CA, at 25°C)。



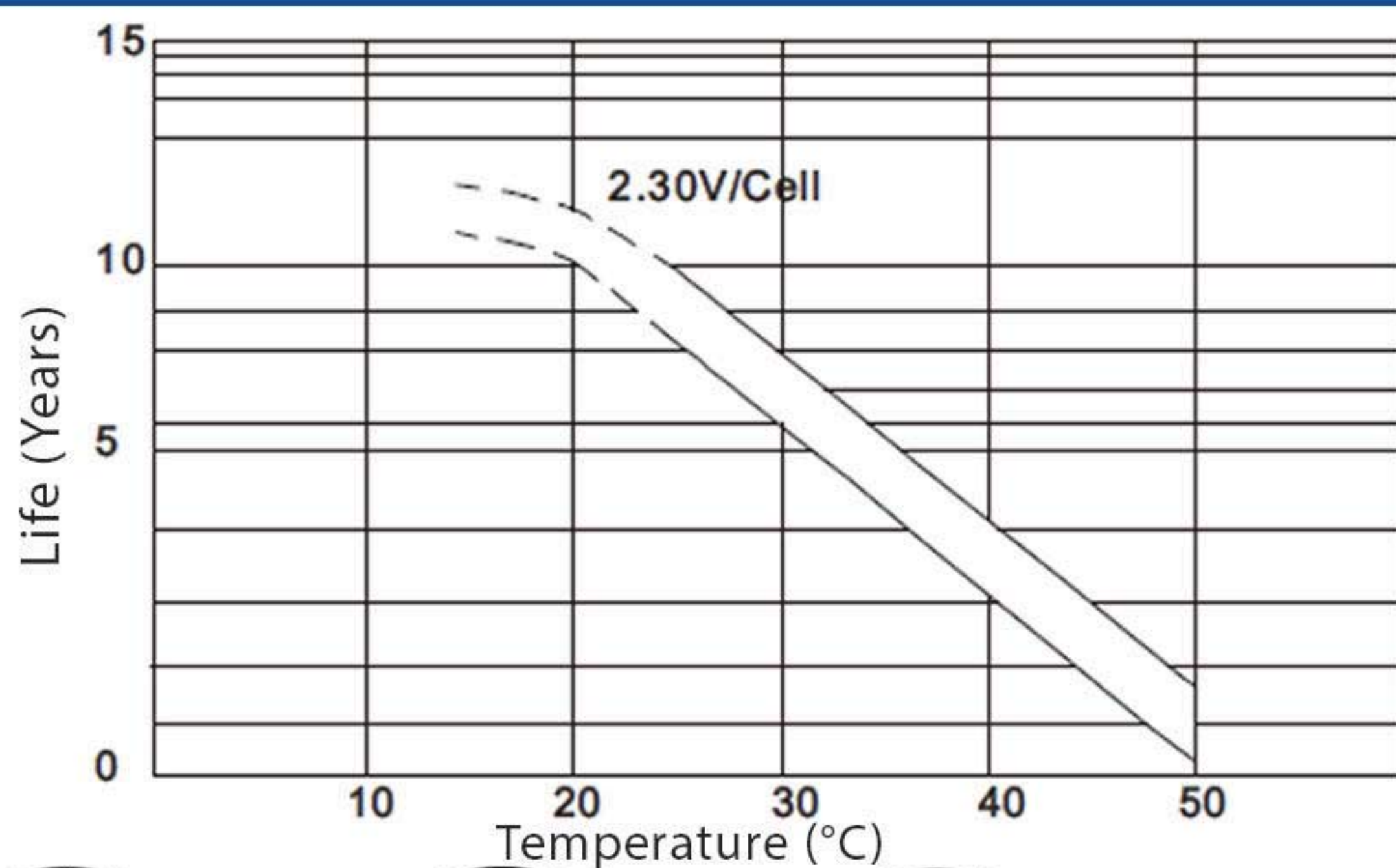
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

