

HR12510W

High Rate Series Battery

General Features



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

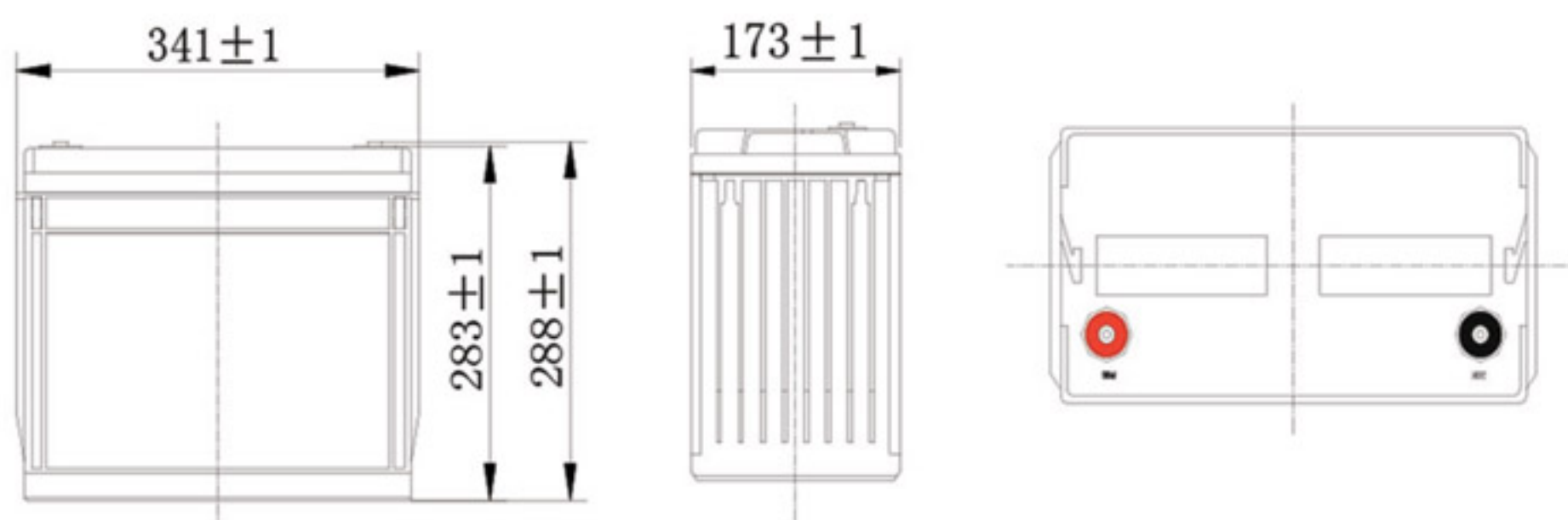
- Safety Sealing
- Non-spillable construction
- High Reliability and Stability
- Sealed and Maintenance-free
- Safety and Quality certification
- Long Life and low self-discharge design

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

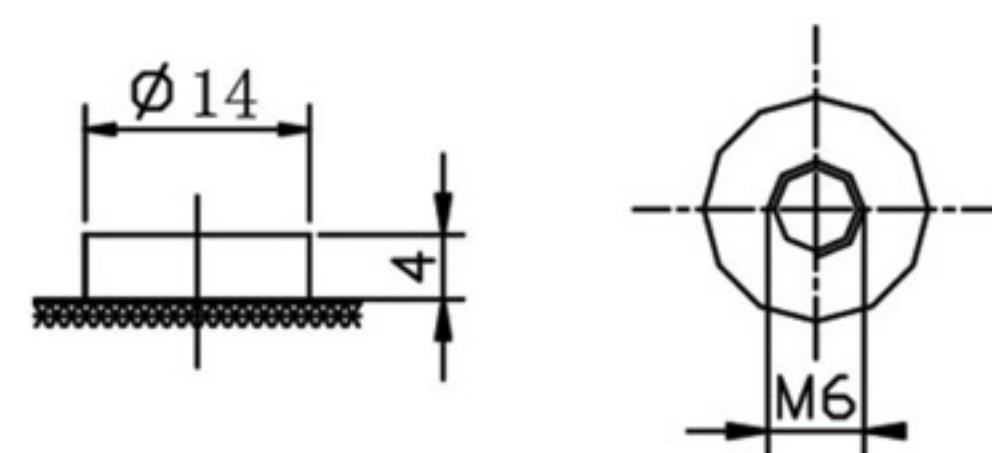
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		135h	
	Capacity(15 minutes rate to 1.67V/Cell)		510 w	
Dimensions	Lenght	With	Height	Total Height
	341mm (13.4 inches)	173mm (6.81inches)	283mm (1.11inches)	288mm (1.13inches)
Aprox Weight	45kg (99.2lbs) ± 4%			
Max. discharge current	1050A (5Sec.)			
Internal Resistance	Full charged at 25°C: Approx 3.5mΩ			
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	
	14.1-14.4V (Initial charging current less than 33.5A)		13.50-13.80V	

Outer Dimensions (mm)



Terminal Type (mm)



Terminal (M6) Unit:mm

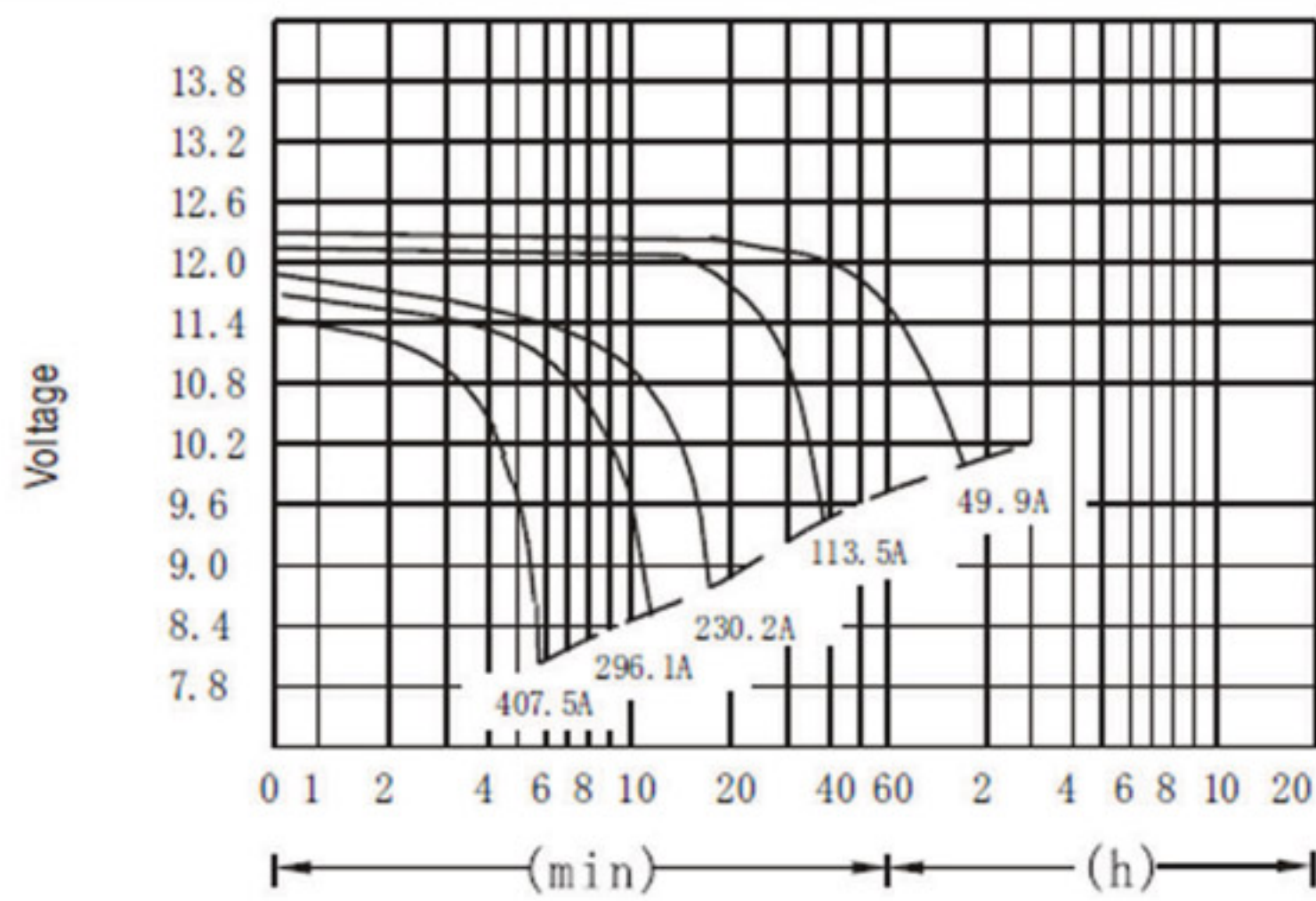
Constant Current(Amp) Discharge at 25°C (77°F)

End Voltage Per cell/V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.6	373	305	255	218	188	169	149	136.5	125	113.5	103	74.5	58.8	50.5	44	34.5	28.8	24	21.2	18.5	16.9	14.3	7.4
1.65	355	288	243	210	182	160	146	133.5	122	111.5	102	72.8	57.5	49.3	43.1	33.7	28.2	23.5	20.9	18.3	16.7	14.2	7.35
1.7	335	270	230	200	175	155	142	130	119	109	100	71	56	48	42	32.8	27.5	23	20.5	18	16.5	14.1	7.3
1.75	315	252	217	190	168	150	138	126.5	116	106.5	98	69.1	54.5	46.7	40.8	31.9	26.8	22.5	20.1	17.7	16.3	14	7.25
1.8	293	233	203	178	160	144	132	122	112	103	95.5	66.8	52.8	45.2	39.5	30.8	26	21.8	19.6	17.3	16	13.8	7.15

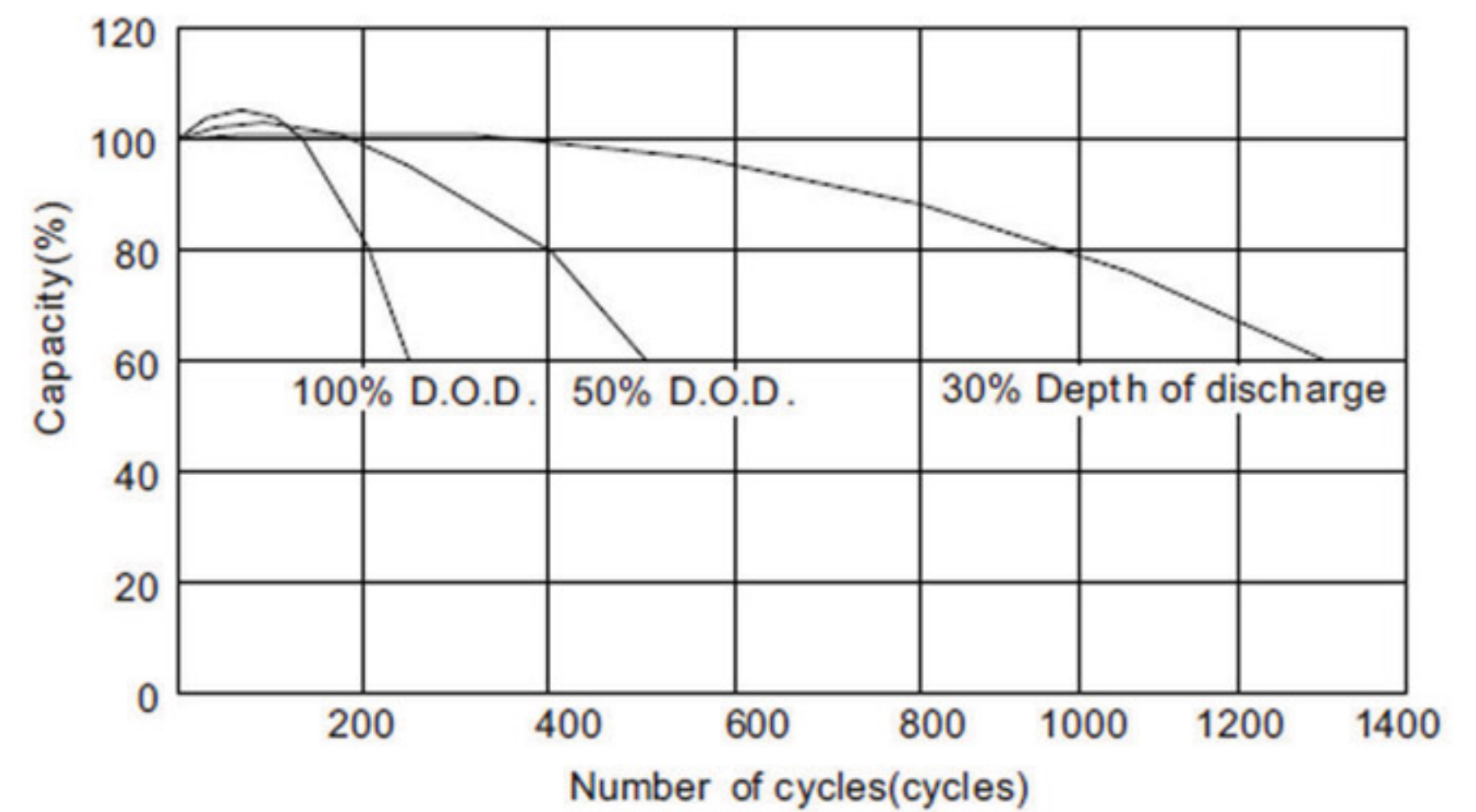
Constant Power(Watt/Cell) Discharge at 25°C (77°F)

End Voltage Per cell/V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h
1.6	610	550	430	375	344	307	279	256	235	212	203	146.5	116.5	97.8	86.2	70.3	57	50.7	45.3	39	36.5	32.1	27.9
1.65	590	530	417	365	334	299	271.5	248.5	228.5	206	197.5	143	114	95.8	84.6	68.8	55.6	49.5	44.4	38.3	35.8	31.7	27.6
1.67	580	510	410	360	330	295	268	245	225	203	195	141.5	113	95	84	68	55	49	44	38	35.5	31.5	27.5
1.7	570	505	402	353	324	290	263	240.5	220.5	200	192	139	111	93.7	83	67.3	54.1	48.3	43.4	37.5	35	31.2	27.3
1.75	545	480	387	341	314	281	254.5	232.5	215	194	187	135	108	91.6	81.4	65.8	52.6	47.1	42.4	36.7	34.2	30.7	27
1.8	520	450	370	328	307	271.5	245.5	224	208	188	181	131	105	89.5	79.8	64.3	51	45.8	41.3	35.9	33.4	30.1	26.7

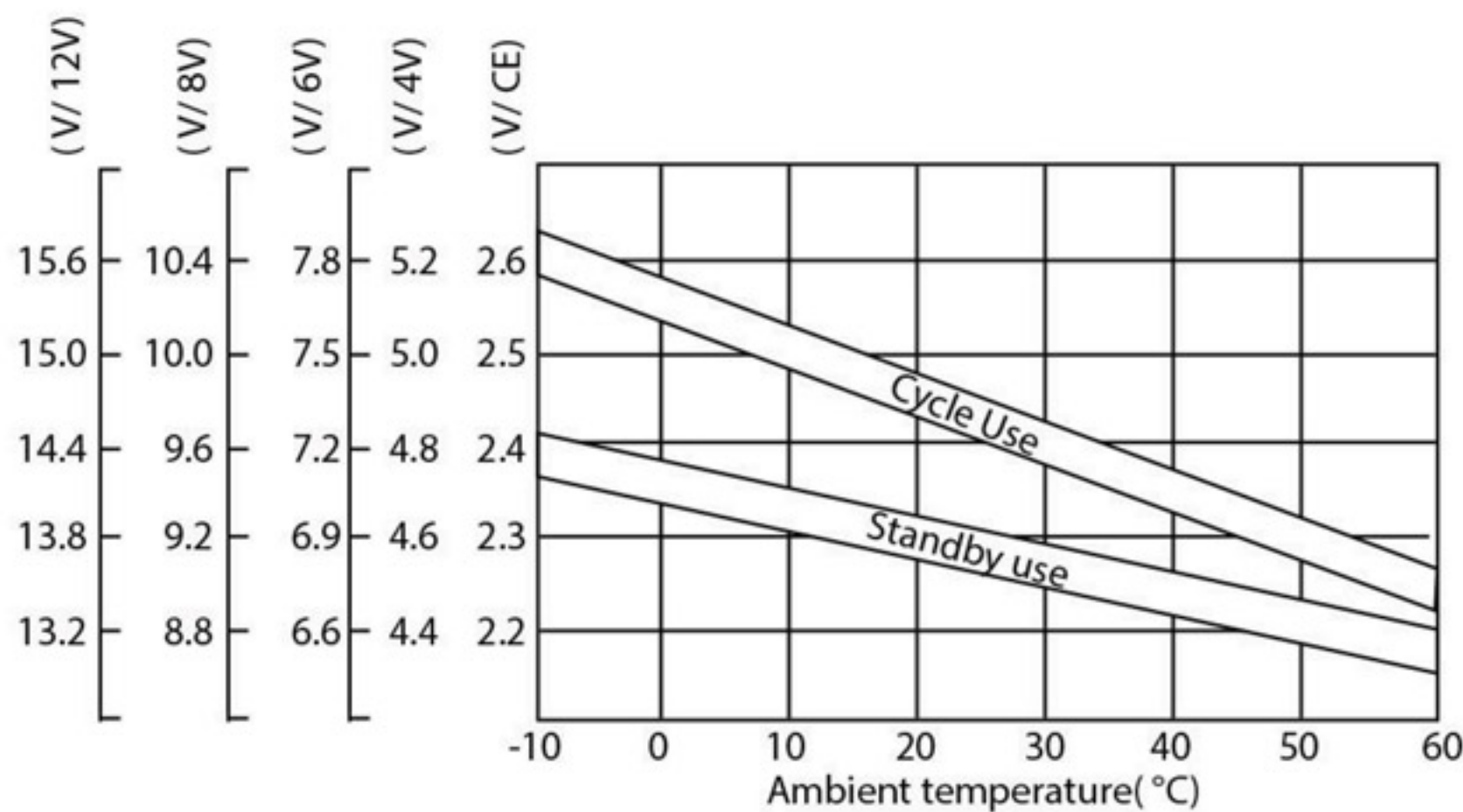
Discharge characteristic Curve



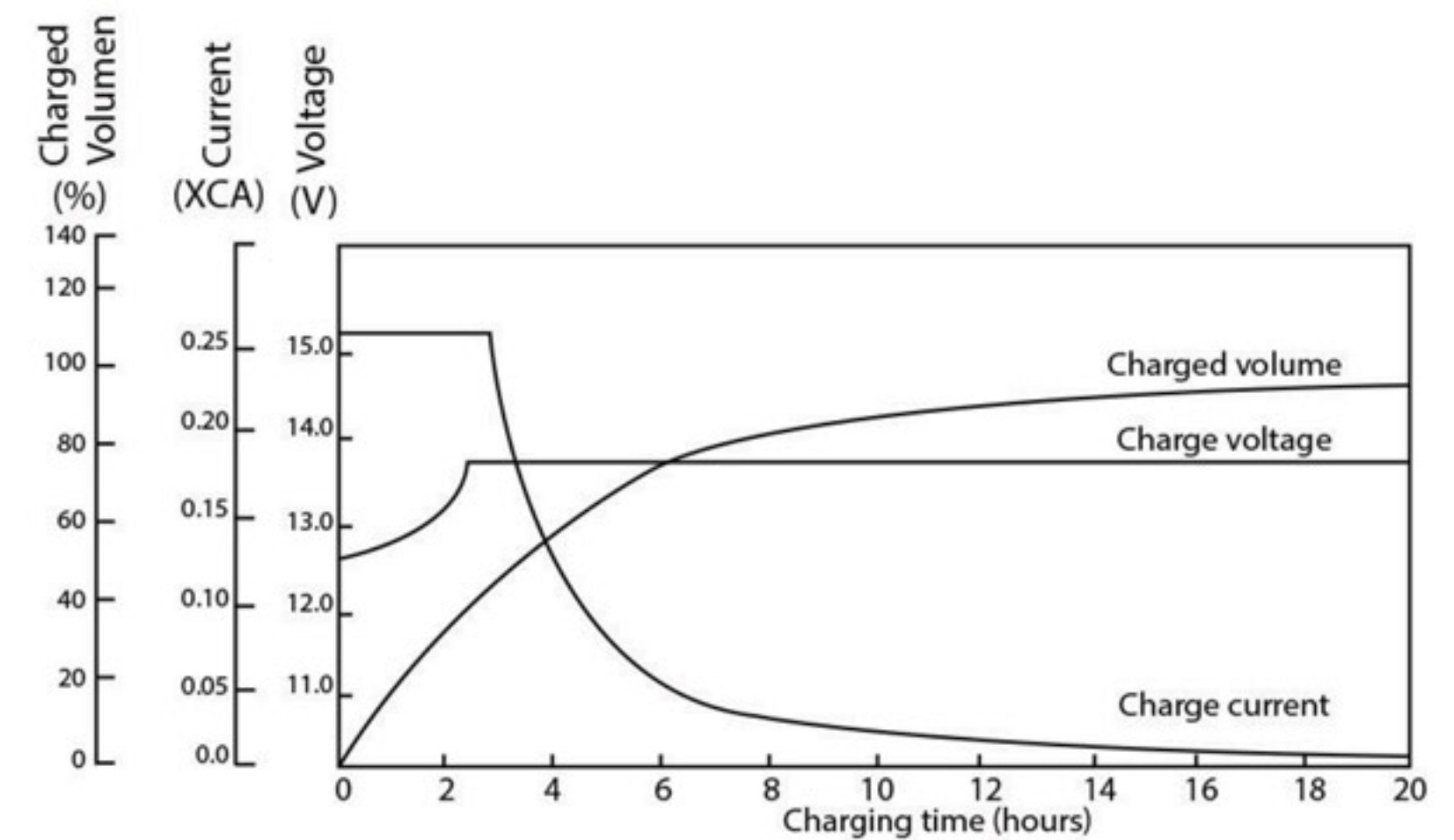
Cycle service life in relation to depth of discharge



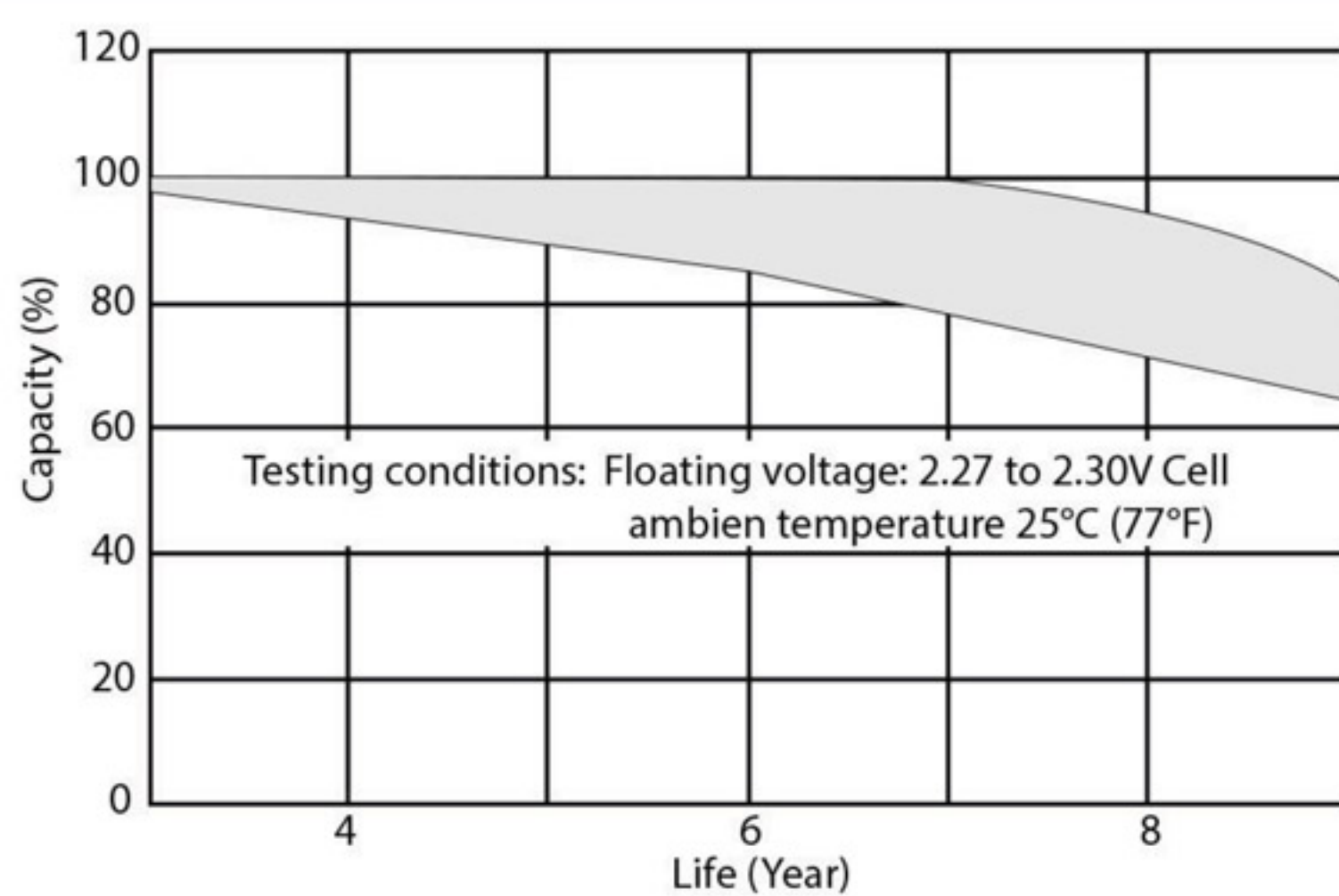
Relationship between charging voltage and temperature



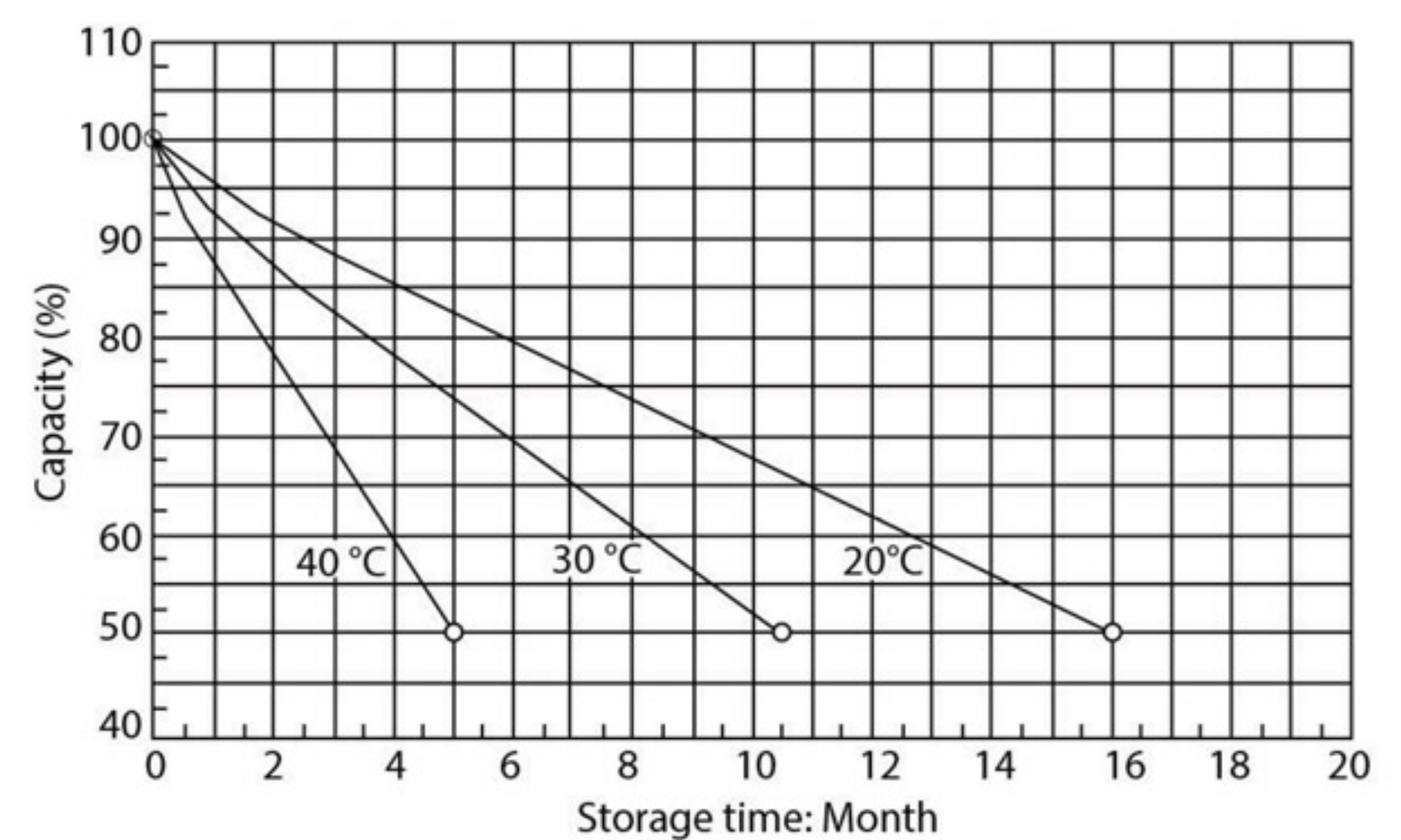
Constant voltage charging characteristic (0.25CA, at 25°C)。



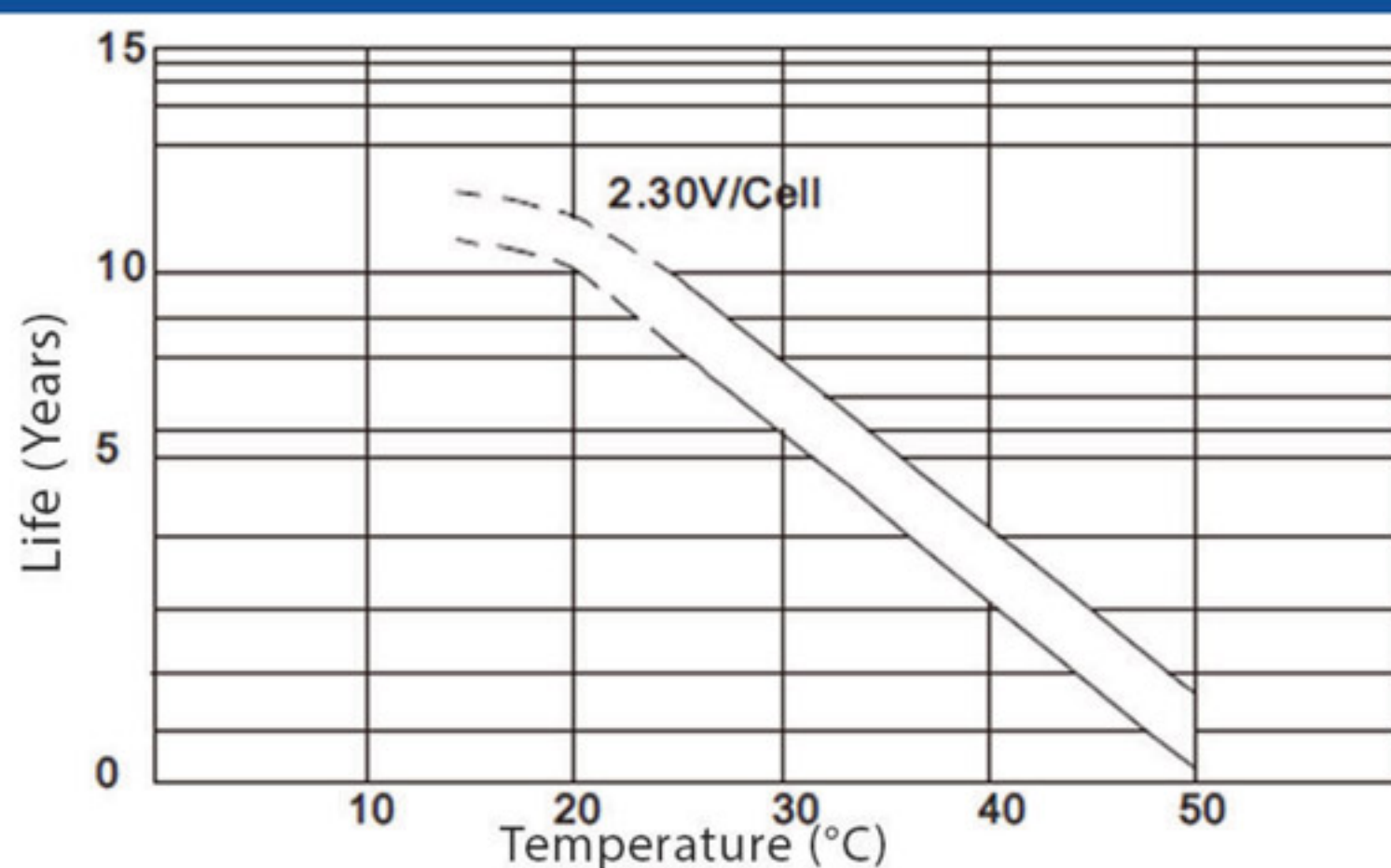
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

