

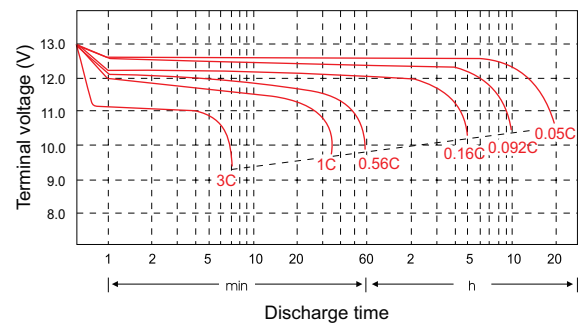
Specifications

Nominal Voltage	12V	
Rated Capacity (20 hour rate)	40Ah	
Dimensions	Total Height (with terminals)	6.69 inches (170mm)
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	length	7.76 inches (197mm)
	width	6.50 inches (165mm)
Weight	Approx 28.7 pound (13.0kg)	

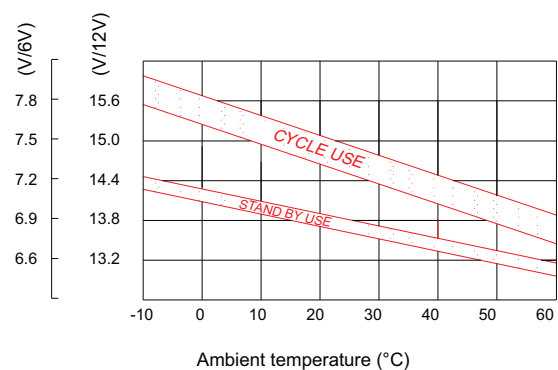
Characteristics

Capacity 77°F (25°C)	20 hour rate (2.0A)	40Ah
	10 hour rate (3.75A)	37.5Ah
	5 hour rate (6.87A)	34.35Ah
	1 hour rate (24.9A)	24.9Ah
	15 minute rate (60.4A)	15.1Ah
Internal Resistance	Full charged Battery 77°F (25°C)	9.5mΩ
	104°F (40°C)	102%
	77°F (25°C)	100%
Capacity Affected by Temperature (20 hour rate)	32°F (0°C)	85%
	5°F (-15°C)	65%
	Capacity after 3 month storage	91%
Self-Discharge 77°F (25°C)	Capacity after 6 month storage	81%
	Capacity after 12 month storage	60%
	Max. Discharge Current 77°F (25°C)	460A (5S)
Terminal	M2 / B5 / B11	
Charge (constant voltage)	Cycle	Initial charging current less than 12A
		Voltage 14.4~14.7 V / 77°F (25°C)
	Float	Voltage 13.5~13.8V / 77°F (25°C)

Discharge Curves 77°F (25°C)



Relationship between charge voltage and temperature



Constant Current Discharge (AMPERES @ 25°C)

F.V/Time	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.65	126	87.6	68.0	40.8	25.5	11.21	6.98	4.18	2.20
1.70	122	86	66.3	40.6	25.3	11.11	6.92	4.0	2.14
1.80	98	73.8	60.4	38.7	24.9	11.0	6.87	3.75	2.0

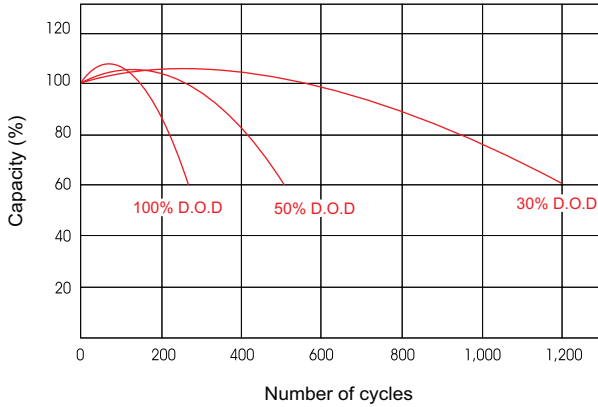
Constant Power Discharge (WATTS PER CELL @ 25°C)

Cut off Voltage V/cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60	235.6	162.2	126.5	80.8	53.0	21.4	14.9	8.65	4.30
1.65	219	157	123	77.7	50.3	21.2	14.7	8.57	4.28
1.70	208	156	123.4	77.1	50.0	21.1	14.65	8.45	4.27
1.75	194	146	116	75.0	49.5	21.0	14.60	8.31	4.23
1.80	174	136	109	73.0	48.6	20.8	14.48	8.17	4.11
1.85	140	112	95	67.0	48.1	20.7	14.28	8.02	3.86

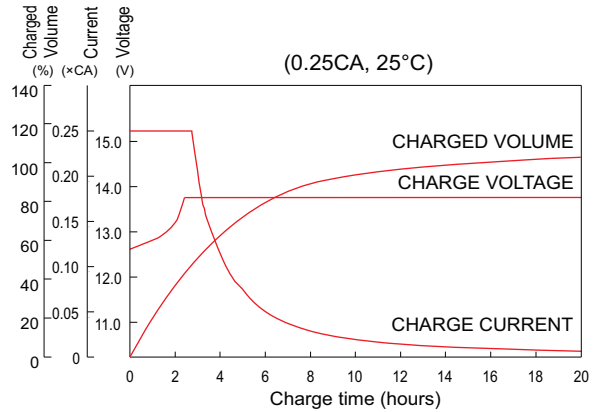
The operating environment temperature above 40°C should be avoided. After long term storage, the battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles.

To get the longest life, battery should be fully charged before storage.

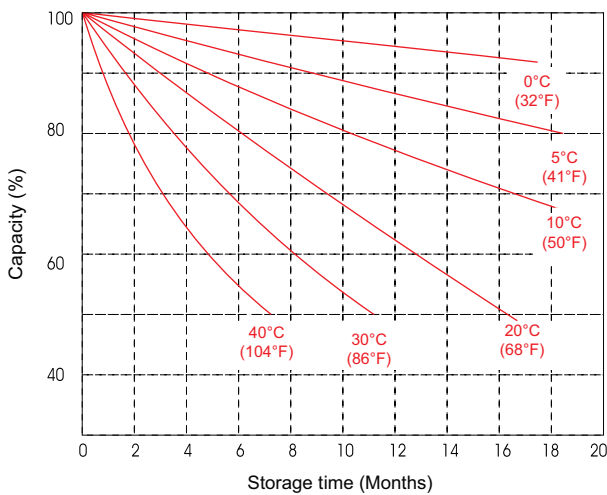
Cycle service life in relation to depth of discharge



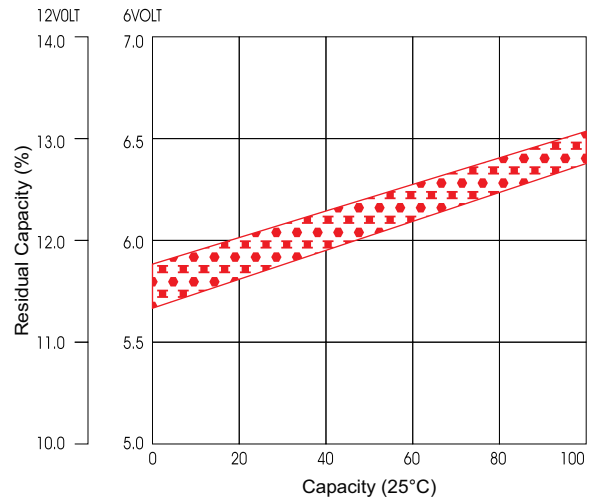
Constant voltage charge characteristic



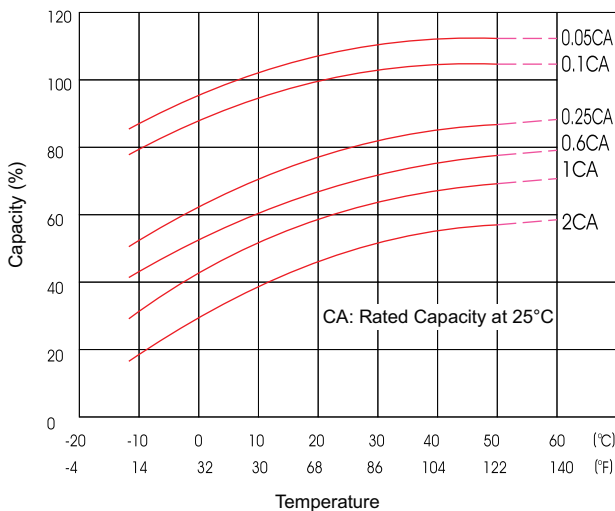
Self-Discharge Characteristics



Relationship of OCV and Residual Capacity % (25°C)



Temperature effects on capacity



Temperature effects float life

