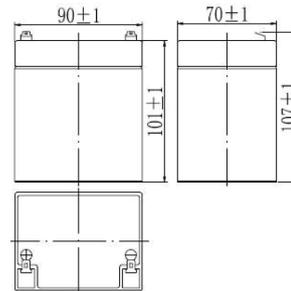
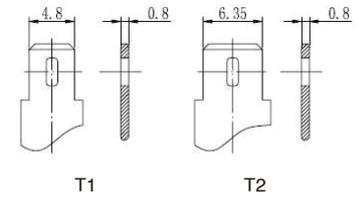




Dimensions



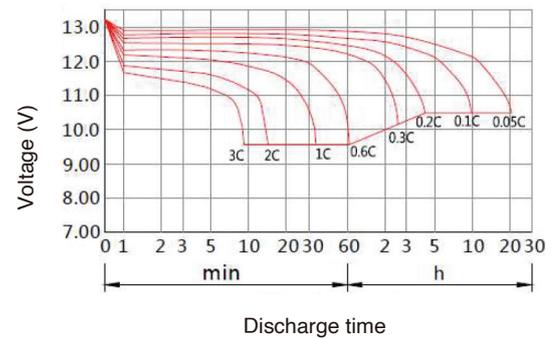
Terminal



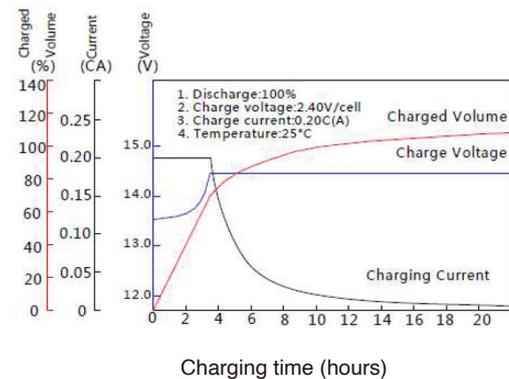
Specifications

Nominal Voltage		12V
Capacity (25°C)	20HR (10.5V)	5Ah
	10HR (10.5V)	4.7Ah
	1HR (9.60V)	3.25Ah
Dimensions	Length	90 ± 1mm (3.54inch)
	Width	70 ± 1mm (2.76inch)
	Height	101 ± 1mm (3.98inch)
	Total Height	107 ± 1mm (4.21inch)
Approx. Weight		1.60kg (3.53lbs) ± 5%
Terminal type		T1/T2
Internal resistance (Fully charged, 25°C)		Approx. 26mΩ
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
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)
Floating charging voltage (25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cycling charging current		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		1.5A
Terminal material		Copper
Maximum discharging current		75A (5sec.)
Design floating life (20°C)		10 years

Discharge Characteristics (25°C)



Charging Characteristics (25°C)



Constant Current Discharge Characteristics (A, 25°C)

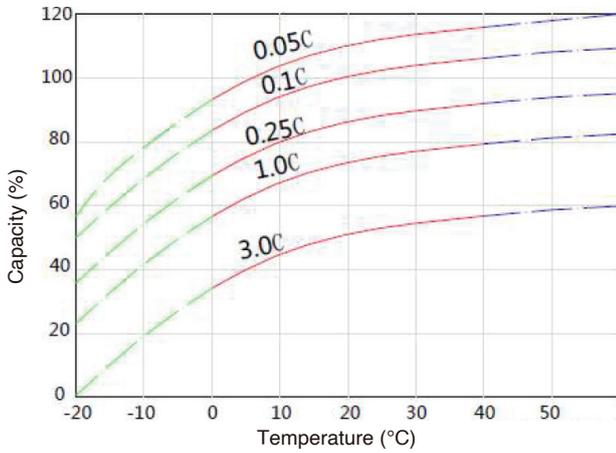
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	19.0	12.0	9.50	5.30	3.25	1.78	1.28	1.02	0.87	0.47	0.25
9.90V	18.4	11.6	9.27	5.19	3.20	1.77	1.27	1.01	0.86	0.47	0.25
10.2V	17.7	11.2	8.93	5.04	3.12	1.75	1.26	1.01	0.86	0.47	0.25
10.5V	16.9	10.7	8.63	4.91	3.06	1.72	1.25	1.00	0.85	0.47	0.25
10.8V	16.0	10.1	8.17	4.73	2.96	1.68	1.21	0.97	0.82	0.46	0.25

Constant Current Discharge Characteristics (Watt, 25°C)

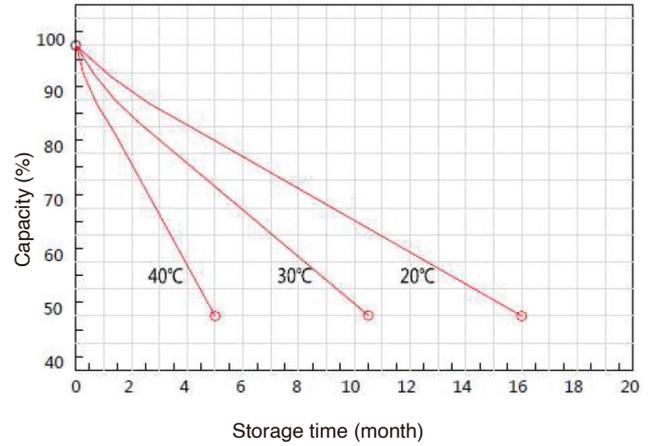
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	212	135	108	60.7	37.6	20.8	15.1	12.1	10.4	5.66	3.05
9.90V	206	131	106	59.5	37.1	20.7	15.1	12.1	10.3	5.64	3.03
10.2V	197	126	102	57.7	36.1	20.5	15.0	12.0	10.2	5.61	3.02
10.5V	189	120	98.3	56.3	35.4	20.2	14.9	11.9	10.1	5.58	3.00
10.8V	178	114	93.1	54.2	34.2	19.7	14.4	11.6	9.84	5.47	2.94

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

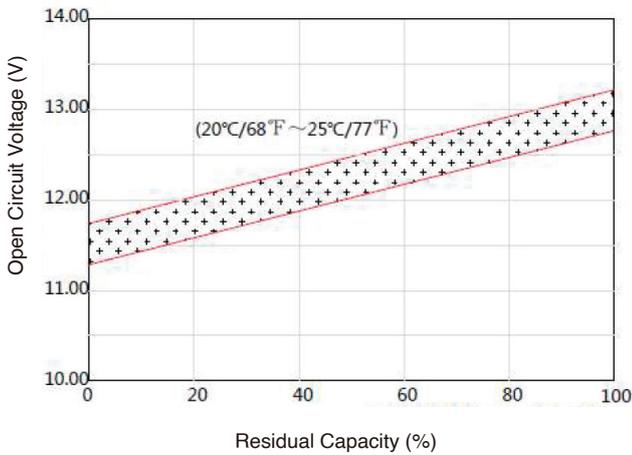
Effect of Temperature on Capacity



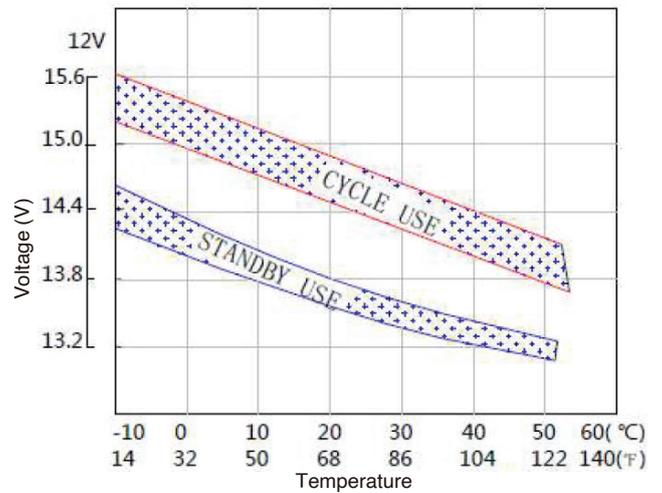
Self-discharge Characteristic



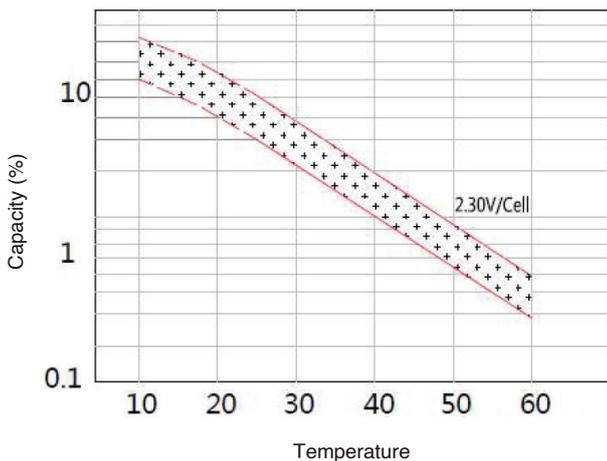
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D (25°C)

