CT SERIES-General Purpose

CT4.5-6 (6V4.5AH)

Specification

Code:460-6020

Nominal Voltage	6V	
Nominal Capacity(20HR)	4.5AH	
Dimensions	Length	70±1mm (2.76 inches)
	Width	47±1mm (1.85 inches)
	Container Height	100±2mm (3.94 inches)
	Total Height (with Terminal)	106±2mm (4.17 inches)
Approx Weight	Approx 0.81 kg (1.79lbs)	
Terminal	T1/T2	
Container Material	ABS	
Rated Capacity	4.50 AH/0.225A	(20hr ,1.80V/cell,25°C/77°F)
	4.19 AH/0.419A	(10hr,1.80V/cell,25°C/77°F)
	3.78 AH/0.756A	(5hr,1.75V/cell,25°C/77°F)
	3.30 AH/1.10A	(3hr,1.75V/cell,25°C/77°F)
	2.77 AH/2.77A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	67.5A (5s)	
Internal Resistance	Approx 25mΩ	
Operating Temp.Range	Discharge : -15～50°C (5～122°F)	
	Charge : 0～40°C (32～104°F)	
	Storage : -15～40°C (5～104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 1.35A.Voltage 7.2V~7.5V at 25°C(77°F)Temp. Coefficient -15mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 6.75V~6.9V at 25°C(77°F)Temp. Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	CT series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	8.35	6.03	5.04	4.31	3.46	2.66	2.17	1.33	1.01	0.831	0.706	0.611	0.486	0.404	0.223
1.80V/cell	10.6	7.19	5.76	4.87	3.83	2.90	2.34	1.41	1.06	0.874	0.736	0.638	0.504	0.419	0.225
1.75V/cell	12.6	8.13	6.35	5.31	4.09	3.08	2.46	1.47	1.10	0.901	0.756	0.654	0.518	0.427	0.227
1.70V/cell	14.3	9.07	6.99	5.73	4.35	3.23	2.58	1.53	1.14	0.924	0.775	0.670	0.525	0.434	0.231
1.65V/cell	15.7	9.80	7.47	6.13	4.58	3.37	2.67	1.58	1.17	0.943	0.792	0.683	0.534	0.440	0.234
1.60V/cell	17.0	10.6	8.01	6.53	4.82	3.51	2.77	1.63	1.19	0.966	0.808	0.696	0.545	0.447	0.236

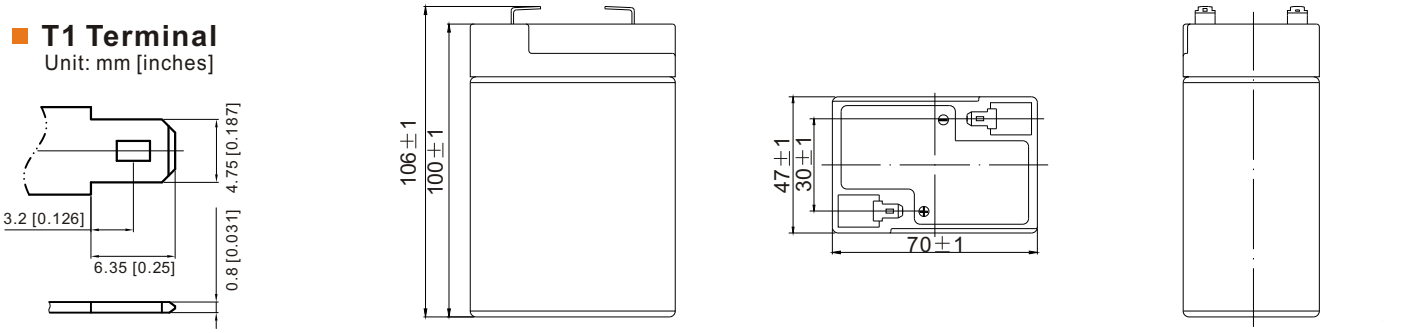
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	15.8	11.5	9.74	8.39	6.78	5.24	4.30	2.64	2.02	1.67	1.42	1.23	0.982	0.819	0.452
1.80V/cell	20.0	13.7	11.1	9.44	7.47	5.69	4.62	2.80	2.12	1.75	1.47	1.28	1.02	0.845	0.455
1.75V/cell	23.4	15.3	12.1	10.2	7.94	6.02	4.85	2.91	2.18	1.79	1.51	1.31	1.04	0.858	0.458
1.70V/cell	26.4	17.0	13.3	11.0	8.42	6.31	5.07	3.02	2.25	1.83	1.54	1.34	1.05	0.869	0.464
1.65V/cell	28.8	18.2	14.0	11.7	8.82	6.55	5.23	3.10	2.30	1.87	1.57	1.36	1.07	0.879	0.470
1.60V/cell	30.7	19.4	14.9	12.3	9.20	6.77	5.39	3.18	2.35	1.91	1.60	1.38	1.08	0.892	0.471

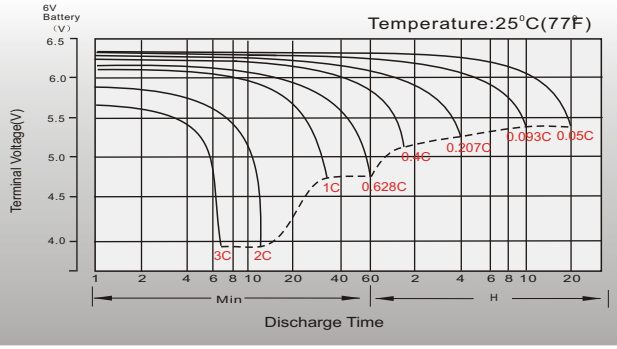
Dimensions

T1 Terminal

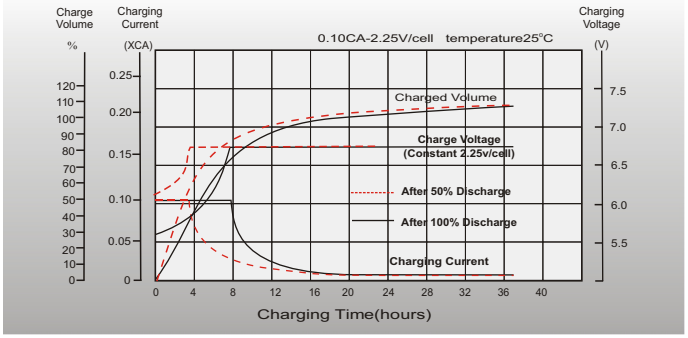
Unit: mm [inches]



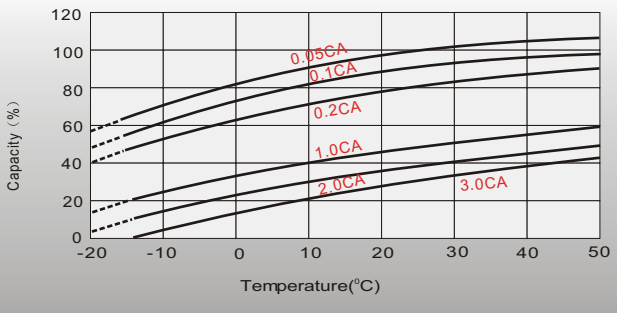
Discharge Characteristics



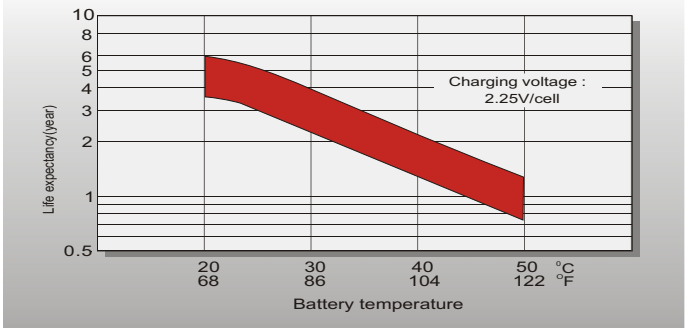
Float Charging Characteristics



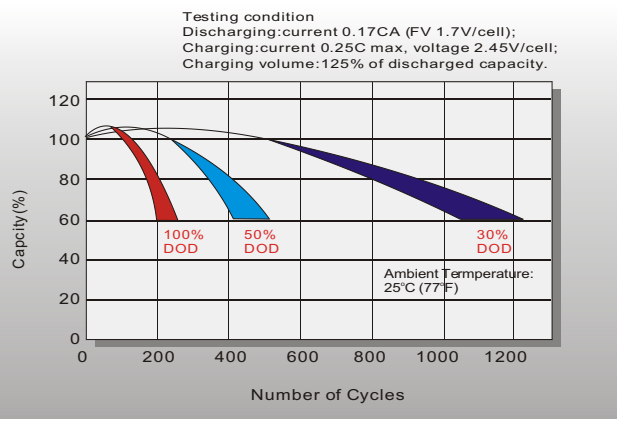
Temperature Effects in Relation to Battery Capacity



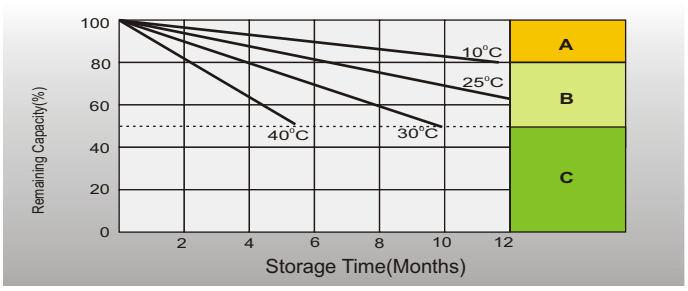
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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