Celltech

CT SERIES-UPS Purpose

CT12-20W/V0 (12V5.4AH)

Specification

Code:460-8515

Nominal Voltage	12V	
Watts(15min Rate)	20.7 Watts at 1.67V/cell	
Dimension	Length	90±1mm (3.54 inches)
	Width	70±1mm (2.76 inches)
	Container Height	101±2mm (3.98 inches)
	Total Height (with Terminal)	107±2mm (4.21 inches)
Approx Weight	Approx 1.80 kg (3.97lbs)	
Terminal	T1 / T2	
Container Material	ABS: UL94HB-V0	
Rated Capacity	5.00 AH/0.50A	(10hr ,1.80V/cell,25°C/77°F)
	4.85 AH/0.606A	(8hr,1.75V/cell,25°C/77°F)
	4.47 AH/0.894A	(5hr,1.75V/cell,25°C/77°F)
	4.05 AH/1.35A	(3hr,1.75V/cell,25°C/77°F)
	3.74 AH/3.74A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	81A (5s)	
Internal Resistance	Approx 25mΩ	
Operating Temp.Range	Discharge : -15～50°C (5～122°F)	
	Charge : -20～40°C (-4～104°F)	
	Storage : -15～40°C (5～104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than1.62A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°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

- *UPS (High rate)*
- *High power backup supply*
- *Emergency power supply*
- *Starting system*
- *Power tools*
- *Emergency lighting*
- *Electric starting*

Standards

- *Compliance with IEC60896 standards,EU Battery Directive*
- *UL,CE*
- *IATF16949,ISO45001,ISO9001and ISO14001 certified production facilities*

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	17.9	12.0	9.35	7.78	5.80	4.21	3.29	1.78	1.27	1.01	0.839	0.728	0.582	0.487	0.265
1.80V/cell	20.2	13.1	10.1	8.27	6.08	4.36	3.41	1.84	1.31	1.03	0.866	0.752	0.606	0.501	0.270
1.75V/cell	22.1	13.9	10.7	8.69	6.32	4.52	3.52	1.90	1.35	1.07	0.894	0.775	0.621	0.514	0.275
1.70V/cell	23.6	14.6	11.2	9.02	6.57	4.66	3.61	1.95	1.39	1.10	0.918	0.794	0.632	0.524	0.279
1.67V/cell	24.7	15.1	11.5	9.30	6.73	4.77	3.68	1.99	1.42	1.12	0.934	0.807	0.640	0.529	0.281
1.60V/cell	25.5	15.5	11.8	9.49	6.83	4.85	3.74	2.02	1.43	1.14	0.946	0.818	0.646	0.534	0.282

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

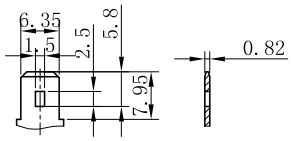
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.5	22.4	17.6	14.7	11.0	8.08	6.35	3.47	2.48	1.97	1.64	1.43	1.15	0.964	0.524
1.80V/cell	36.5	24.1	18.6	15.5	11.5	8.30	6.54	3.55	2.54	2.01	1.69	1.47	1.19	0.989	0.534
1.75V/cell	39.6	25.2	19.6	16.1	11.8	8.56	6.73	3.65	2.61	2.07	1.74	1.51	1.22	1.015	0.544
1.70V/cell	41.7	26.2	20.3	16.6	12.2	8.77	6.88	3.75	2.68	2.13	1.78	1.55	1.24	1.034	0.551
1.67V/cell	43.0	26.7	20.7	16.9	12.4	8.92	6.97	3.81	2.72	2.16	1.81	1.57	1.25	1.043	0.554
1.60V/cell	43.5	27.0	20.8	17.0	12.4	8.99	7.04	3.85	2.74	2.18	1.82	1.58	1.26	1.049	0.556

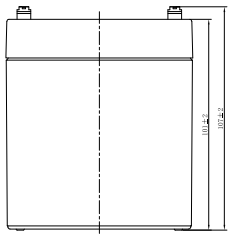
Specifications subject to change without notice.

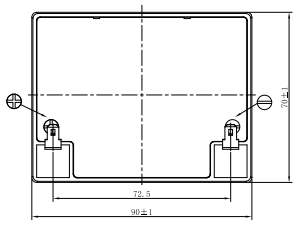
Dimensions

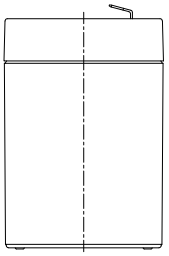
T2 Terminal

Unit: mm [inches]

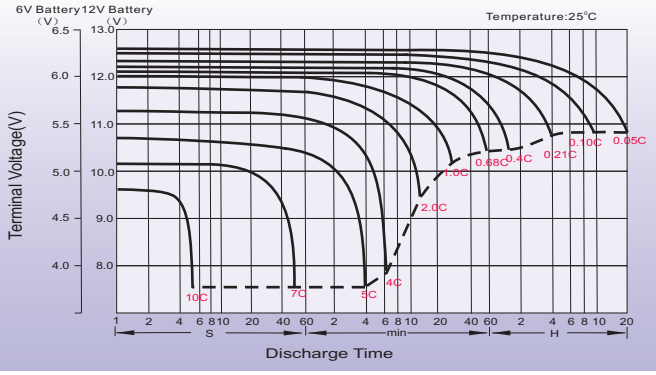




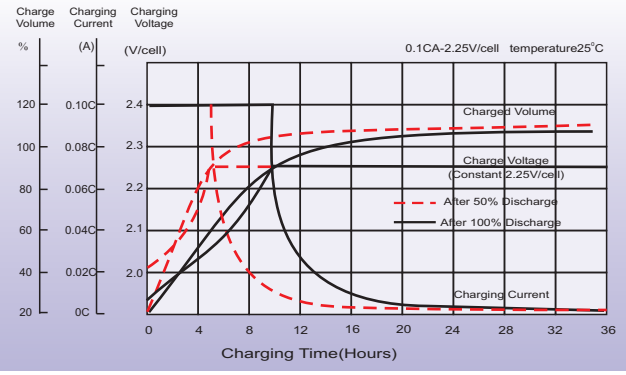




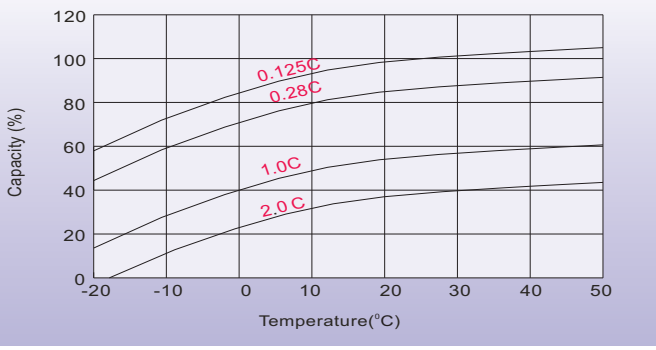
Discharge Characteristics



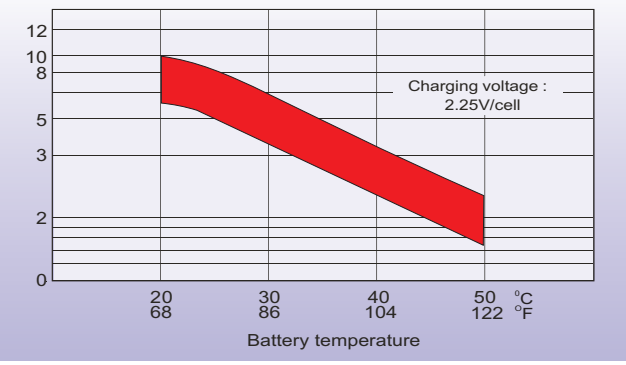
Float Charging Characteristics

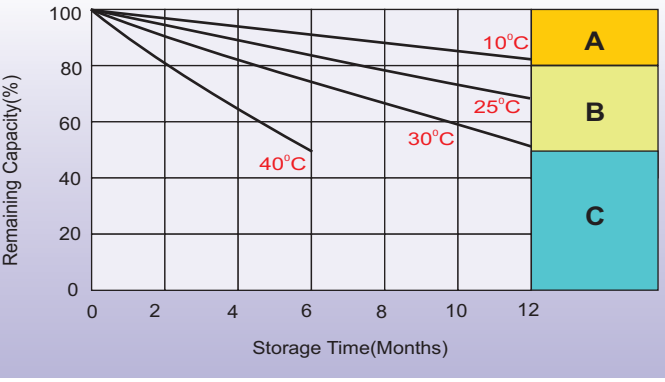


Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life





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.

Sales Office

For more information and the contact details of the local suppliers,
please visit CELLTECH-GROUP.COM

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