CHR7.8-12

12V 7.8AH

High Rate Battery

CANBAT

CHR7.8-12

Physical Specification

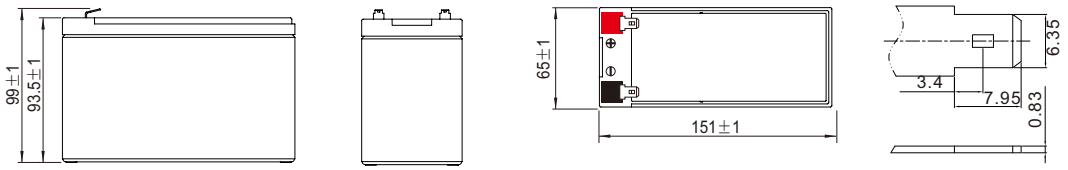
Part Number:	**CHR7.8-12**
Length:	**151±1mm (5.94 inches)**
Width:	**65±1mm (2.56 inches)**
Container Height:	**93.5±1mm (3.68 inches)**
Total Height (with terminal):	**99±1mm (3.90 inches)**
Approx Weight:	**2.50 Kg (5.51 lbs)**

Specifications

	Nominal Voltage	12V	
	Nominal Rate (W ,1.67V/cell)	35W	
	Nominal Capacity (C10,1.80V/cell)	7.8Ah	
	Technology	High Rate Discharge	
	Terminal Type	T2	
Container Material	Flame Retardant (FR)	ABS (UL94:VO)	
Rated Capacity (25°C)	(10hr, 0.781A,1.80V/cell)	7.81 Ah	
	(8hr, 0.958A,1.80V/cell)	7.66 Ah	
	(5hr, 1.44A,1.75V/cell)	7.20 Ah	
	(3hr, 2.21A,1.75V/cell)	6.63 Ah	
	(1hr, 5.46A,1.67V/cell)	5.46 Ah	
Max Currents (5s)	108A		
Internal Resistance	Approx. 22.0mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -20°C~55°C (-4°F~131°F)	
		Charge: 0°C~40°C (32°F~104°F)	
		Storage: -15°C~50°C (5°F~122°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Max.Charging Current(25°C)	2.16A	
	Charge voltage(25°C)	Float	13.5V
		Temp. Coefficient	-3m V/cell/ C
		Equalization	14 .1~14.4V
	Effect of temperature on Capacity	40°C (104°F)	106%
		25°C (77°F)	100%
		0°C (32°F)	86%
Design Floating Life at 20°C	20+ Years		
Self Discharge	Canbat High Rate batteries may be stored for up to 6 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%		

Dimensions

T2 Terminal



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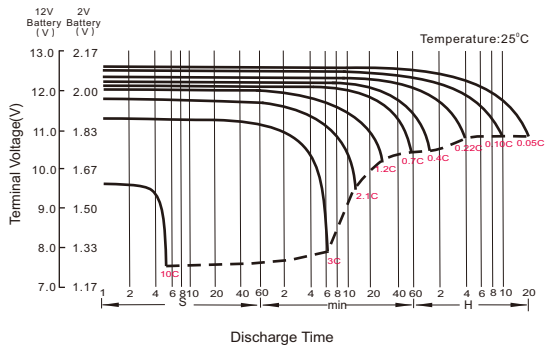
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	24.8	16.5	13.4	10.4	7.75	5.62	4.49	3.32	2.66	1.99	1.57	1.31	0.894	0.732
1.80V/cell	28.9	19.5	15.5	12.0	8.76	6.28	4.97	3.63	2.89	2.15	1.70	1.41	0.958	0.781
1.75V/cell	31.6	20.9	16.4	12.6	9.16	6.54	5.16	3.75	2.98	2.21	1.74	1.44	0.975	0.793
1.70V/cell	34.2	22.3	17.4	13.3	9.56	6.79	5.35	3.88	3.07	2.27	1.78	1.48	0.992	0.806
1.67V/cell	35.7	23.2	17.9	13.6	9.80	6.94	5.46	3.95	3.13	2.31	1.81	1.50	1.00	0.813
1.60V/cell	39.4	25.1	19.2	14.5	10.3	7.29	5.72	4.13	3.26	2.39	1.87	1.54	1.03	0.830

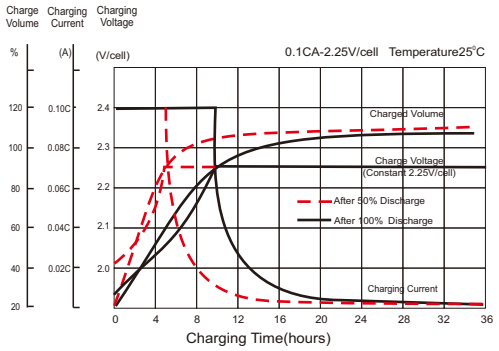
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	47.3	31.7	26.6	20.1	15.0	10.9	8.73	6.47	5.19	3.90	3.09	2.58	1.77	1.45
1.80V/cell	54.5	37.0	30.5	22.9	16.8	12.1	9.60	7.04	5.62	4.20	3.32	2.77	1.89	1.54
1.75V/cell	58.7	39.2	32.9	23.8	17.4	12.5	9.88	7.23	5.76	4.30	3.39	2.83	1.92	1.57
1.70V/cell	62.7	41.3	34.3	24.8	18.0	12.9	10.2	7.43	5.91	4.40	3.47	2.88	1.95	1.59
1.67V/cell	64.9	42.5	35.0	25.3	18.4	13.1	10.3	7.54	5.99	4.45	3.51	2.91	1.97	1.60
1.60V/cell	70.7	45.5	36.9	26.6	19.2	13.6	10.7	7.81	6.20	4.59	3.60	2.99	2.01	1.63

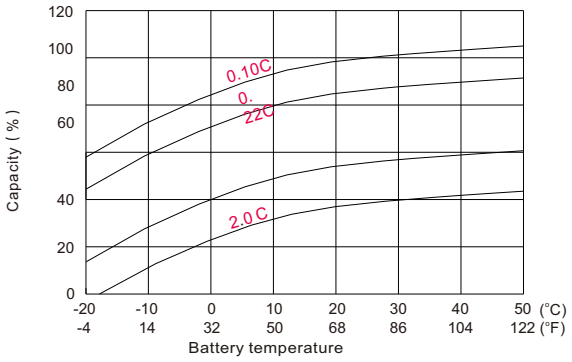
Discharge Characteristics



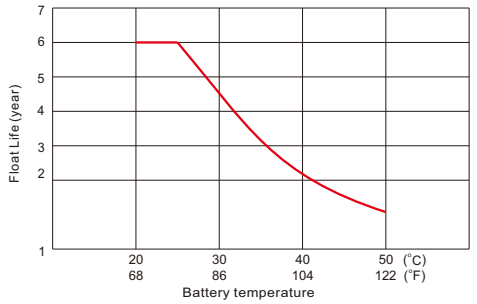
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



High Rate Batteries

The most important asset for many businesses is data. Whether it's customer data, employee data or financial data, no business can afford to lose it. Unfortunately, unexpected power interruptions may lead to a loss of data, which could potentially cost thousands of dollars. To solve this issue, Canbat has developed the highest performing high rate batteries, which are specially designed for back-up power systems. Our batteries have a proven track record to be the most reliable in the industry, backed up with the best warranty in Canada. In the event of a power outage, UPS systems provide back-up power to your equipment. The most important component in any UPS is the battery. Whether the UPS is hooked up to your personal computer at home, or to your equipment at work, Canbat offers top-performing batteries you can count on. If you don't have high performing batteries in your UPS during a power outage, you are putting yourself at risk of losing data. A power surge or blackout could erase hours of hard work and damage your equipment.