

CHR 27-12

12V 27AH

High Rated



CHR27-12

Awaiting Image

Physical Specification

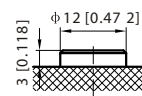
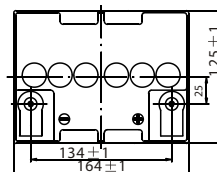
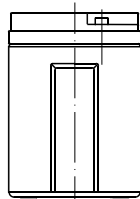
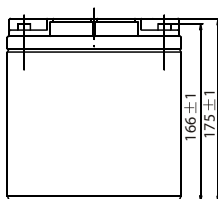
Part Number:	CHR27-12
Length:	164 ± 2 mm (6.46 inches)
Width:	125 ± 2 mm (4.92 inches)
Container Height:	166 ± 2 mm (6.54 inches)
Total Height (with terminal):	175 ± 2 mm (6.89 inches)
Approx Weight:	Approx 7.9 kg (17.4lbs)

Specifications

	Nominal Voltage	12V	
	Nominal Capacity (20HR)	27AH	
Terminal Type	Standard Terminal	T12	
	Optional Terminal	-	
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	27.0AH/1.35A	(20hr, 1.80V/cell, 25°C / 77°F)	
	26.1AH/2.61A	(10hr, 1.80V/cell, 25°C / 77°F)	
	23.75AH/4.75A	(5hr, 1.75V/cell, 25°C / 77°F)	
	21.96AH/7.32A	(3hr, 1.75V/cell, 25°C / 77°F)	
	18.6AH/18.6A	(1hr, 1.60V/cell, 25°C / 77°F)	
Max Discharge Current	540A (5s)		
Internal Resistance	Approx 10mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)	
		Charge: 0 ~ 40°C (5 ~ 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 7.2A. 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%	
Design Floating Life at 20°C	12 + Years		
Self Discharge	Canbat batteries may be stored for up to 6 months at 25°C(77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.		

Dimensions

T12 Terminal



Unit: mm [inches]

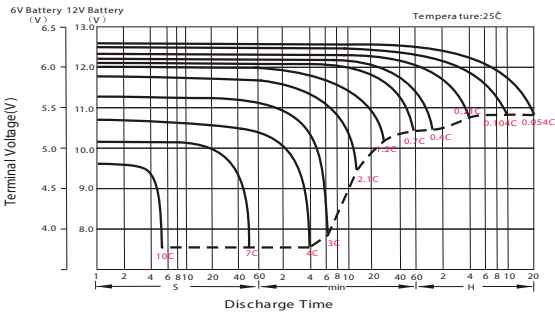
Constant Power Discharge (Watts/Cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	121.5	93.3	76.8	65.3	51.0	38.9	31.7	18.9	13.9	11.0	9.18	7.91	6.26	5.22	2.74
1.80V/cell	137.1	102.2	82.2	68.4	53.6	40.8	33.4	19.8	14.3	11.3	9.45	8.13	6.42	5.33	2.77
1.75V/cell	154.5	108.1	86.6	72.3	55.3	41.7	34.1	20.2	14.6	11.5	9.55	8.23	6.52	5.42	2.82
1.70V/cell	167.8	114.3	89.2	74.2	56.6	42.6	34.8	20.5	14.8	11.7	9.72	8.39	6.61	5.47	2.85
1.67V/cell	177.1	118.7	92.8	76.3	57.9	43.4	35.5	20.8	15.0	11.8	9.89	8.53	6.70	5.54	2.89
1.60V/cell	181.9	121.3	94.8	78.2	59.3	44.0	35.9	21.0	15.2	12.0	10.0	8.62	6.77	5.61	2.94

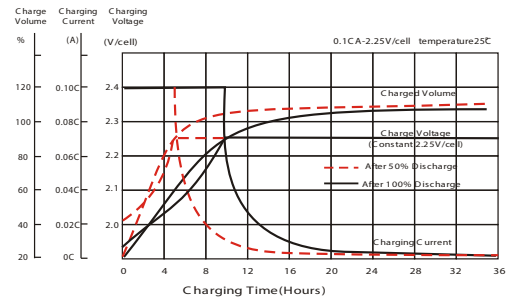
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	62.5	47.7	39.0	33.0	25.7	19.5	15.8	9.40	6.86	5.44	4.51	3.88	3.05	2.54	1.32
1.80V/cell	71.2	52.8	42.2	34.9	27.2	20.6	16.8	9.88	7.12	5.61	4.67	4.01	3.15	2.61	1.35
1.75V/cell	81.1	56.4	44.8	37.3	28.3	21.3	17.3	10.2	7.32	5.74	4.75	4.08	3.22	2.66	1.38
1.70V/cell	89.1	60.3	46.8	38.6	29.2	21.9	17.7	10.4	7.47	5.88	4.87	4.19	3.29	2.71	1.40
1.67V/cell	94.8	63.0	48.9	40.1	30.1	22.5	18.2	10.6	7.62	5.98	4.98	4.28	3.34	2.75	1.43
1.60V/cell	98.5	65.1	50.5	41.5	31.1	23.0	18.6	10.8	7.76	6.12	5.10	4.37	3.41	2.81	1.47

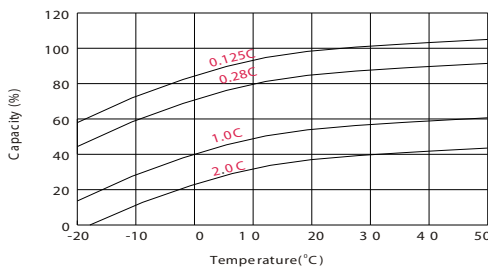
Discharge Characteristics



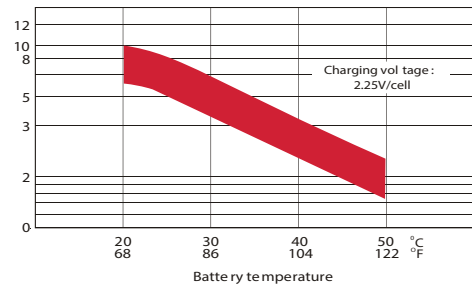
Float Charging Characteristics



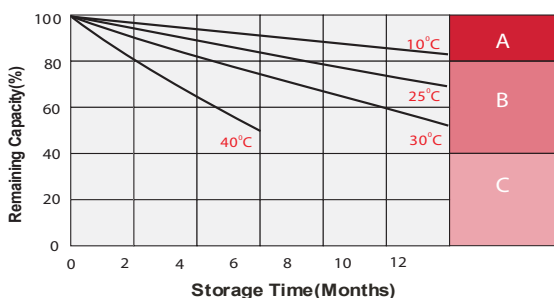
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



A

No supplementary required
(Carryout 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 limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

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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