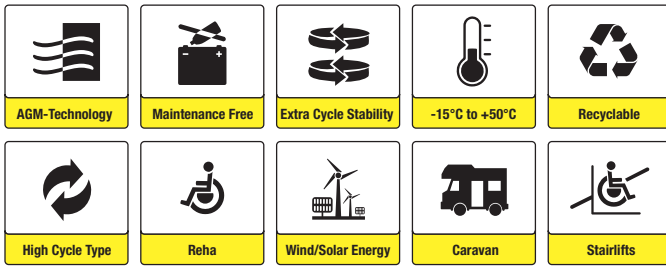




# HC12-13 T2 (12V13Ah)



## Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys
- Portable apparatus, lights and instruments
- Electric toys
- Portable power
- Wheelchairs
- Medical equipments
- Wind/Solar energy
- Electric boats
- Caravan



## Certificates



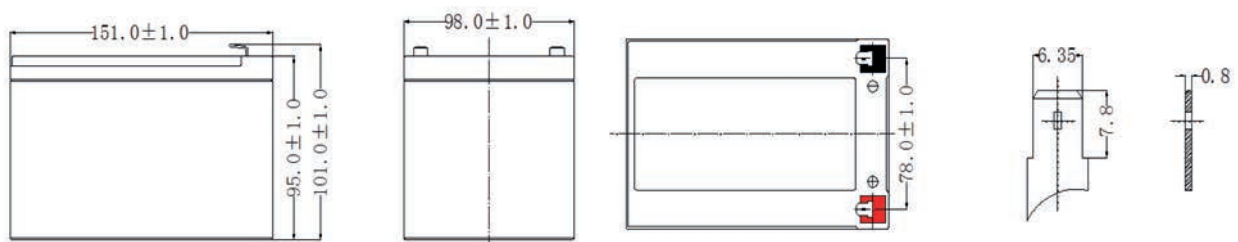
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	13Ah (C <sub>20</sub> , 1.75V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 4.8A. Voltage 14.55V +-1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	4.40kg	<b>Standby Use</b>	Initial Charging Current less than 4.8A. Voltage 13.65V +-1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	T2	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 HB	<b>Self Discharge</b>	HC batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (25°C)</b>	13.00Ah/0.65A, 20hr, 1.75V/cell 12.50Ah/1.25A, 10hr, 1.75V/cell 10.65Ah/2.13A, 5hr, 1.75V/cell 10.65Ah/3.55A, 3hr, 1.60V/cell 9.17Ah/9.17A, 1hr, 1.60V/cell	<b>Cycle Life</b>	Approx. 450 cycles at 50% DOD
<b>Max. Discharge Current</b>	180A (5s)		
<b>Internal Resistance</b>	Approx. 16mΩ		
<b>Operating Temp. Range</b>	Discharge:        -15~50°C Charge:            0-40°C Storage:           -15~40°C		

## Dimensions

### ■ T2 Terminal

Unit: mm | Dimensions: 151 Length X 98 Width X 95 Height (101 Height incl. Terminal)





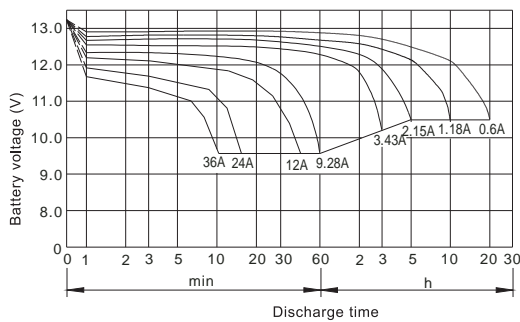
### Constant Current Discharge (Amperes) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	52.9	24.8	26.3	15.5	9.17	3.55	2.28	1.30	0.684
1.65V/cell	50.3	33.4	25.5	15.2	9.09	3.52	2.22	1.28	0.670
1.70V/cell	47.7	32.8	24.8	14.62	8.96	3.47	2.17	1.27	0.655
1.75V/cell	44.8	31.6	23.7	14.3	8.87	3.31	2.13	1.25	0.650
1.80V/cell	41.9	30.4	22.5	13.6	8.75	3.42	2.06	1.23	0.628

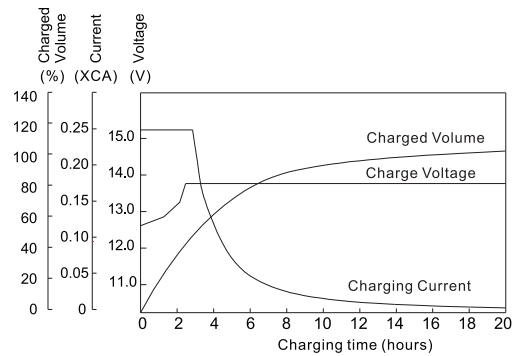
### Constant Power Discharge (Watts/cell) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	104.83	69.17	34.5	31.3	17.67	7.23	4.85	2.75	1.43
1.65V/cell	99.83	67.83	49.83	30.83	17.42	7.08	4.75	2.72	1.40
1.70V/cell	95.00	65.67	48.67	30.00	17.33	6.70	4.65	2.68	1.38
1.75V/cell	89.67	63.17	47.33	29.17	16.83	6.57	4.57	2.63	1.35
1.80V/cell	84.33	60.50	45.5	28.17	15.85	8.63	4.38	2.63	1.31

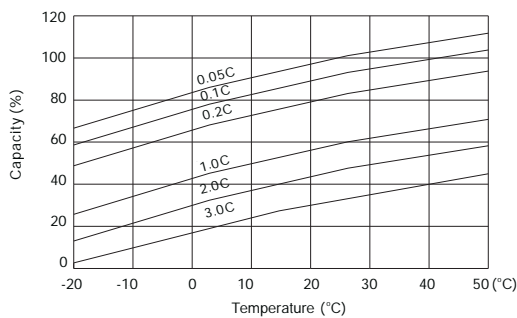
### Discharge Characteristics (25°C)



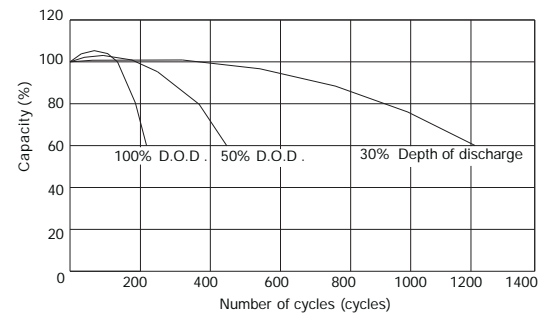
### Float Charging Characteristics (25°C)



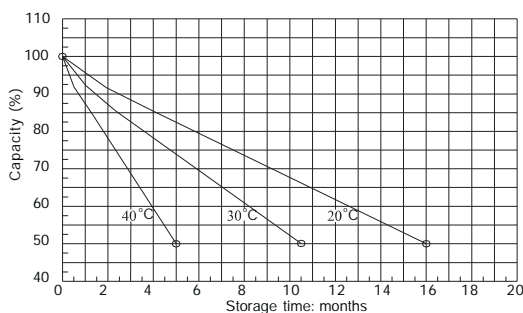
### Temperature Effects in Relation to Battery Capacity



### Cycle Service Life in Relation to Depth of Discharge



### Self Discharge Characteristics



### Temperature Effects on Float Life

