Celltech

CT SERIES-General Purpose

CT40-12 (12V40AH)

Specification

Code:460-6105

Nominal Voltage	12V
Nominal Capacity(10HR)	38.0AH
Dimension	Length 197±2mm (7.76 inches) Width 165±2mm (6.50 inches) Container Height 170±2mm (6.69 inches) Total Height (with Terminal) 170±2mm (6.69 inches)
Approx Weight	Approx 12.2 Kg (26.9lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	40.0 AH/2.0A (20hr ,1.80V/cell,25°C/77°F) 38.0 AH/3.8A (10hr,1.80V/cell,25°C/77°F) 32.7 AH/6.55A (5hr,1.75V/cell,25°C/77°F) 29.7 AH/9.89A (3hr,1.75V/cell,25°C/77°F) 23.2 AH/23.2A (1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	456A (5s)
Internal Resistance	Approx 10.0mΩ
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 than12.0A.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

- *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*

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	65.0	51.1	43.5	36.4	28.9	21.9	17.9	11.4	9.02	7.37	5.94	5.17	4.20	3.59	1.96
1.80V/cell	87.3	65.3	52.5	43.0	34.1	25.4	20.1	12.5	9.71	7.87	6.38	5.55	4.45	3.80	2.00
1.75V/cell	98.4	71.8	57.4	46.2	35.4	26.4	21.0	12.9	9.89	8.04	6.54	5.70	4.53	3.84	2.02
1.70V/cell	108.4	78.2	61.3	48.6	36.9	27.5	21.7	13.4	10.2	8.26	6.71	5.82	4.59	3.88	2.03
1.65V/cell	119.5	84.4	65.1	51.6	38.9	28.1	22.4	13.8	10.6	8.54	6.90	5.95	4.67	3.96	2.06
1.60V/cell	131.8	91.7	69.7	55.0	41.0	29.3	23.2	14.3	10.9	8.81	7.13	6.08	4.71	4.00	2.07

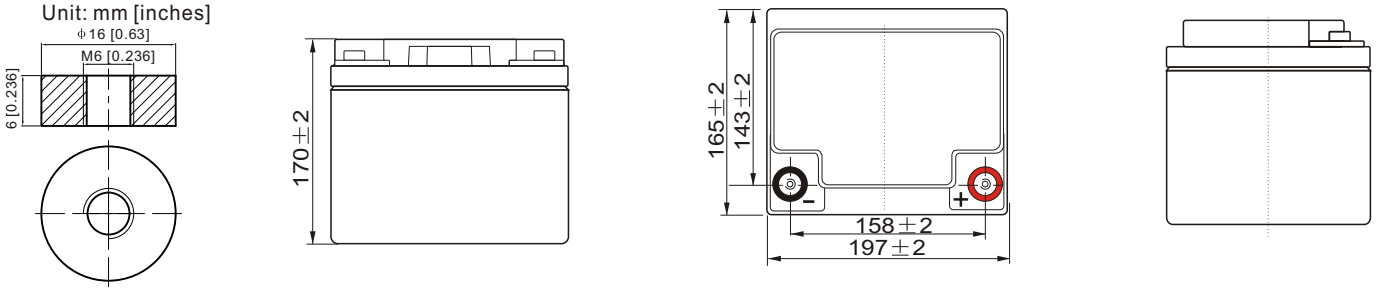
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	118.9	94.5	81.1	68.6	55.1	42.1	34.6	22.2	17.6	14.4	11.6	10.2	8.29	7.10	3.88
1.80V/cell	157.9	119.3	96.7	79.9	64.0	48.5	38.5	24.0	18.8	15.3	12.4	10.9	8.77	7.51	3.91
1.75V/cell	174.3	128.9	104.3	85.1	65.9	49.9	40.1	24.8	19.1	15.6	12.7	11.1	8.90	7.57	3.94
1.70V/cell	186.6	137.4	109.9	88.7	68.2	51.7	41.2	25.8	19.6	16.0	13.0	11.3	9.01	7.64	4.01
1.65V/cell	202.8	146.9	115.9	93.6	71.4	52.5	42.3	26.3	20.3	16.5	13.3	11.6	9.13	7.79	4.06
1.60V/cell	218.5	155.8	121.9	98.6	74.8	54.4	43.6	27.1	20.9	16.9	13.7	11.8	9.20	7.86	4.08

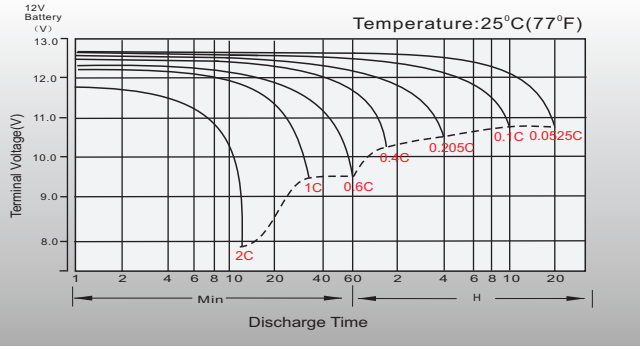
Dimensions

T6 Terminal

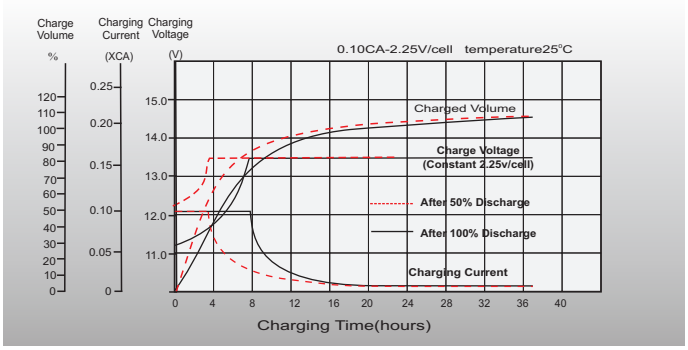
Unit: mm [inches]



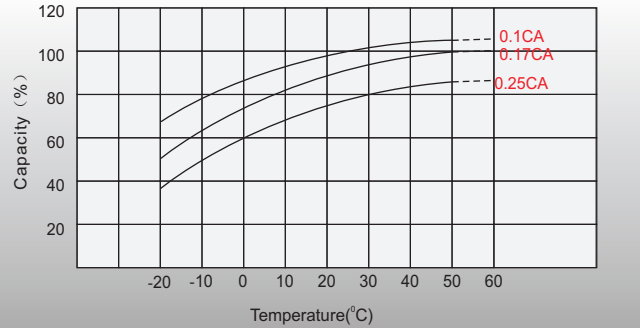
Discharge Characteristics



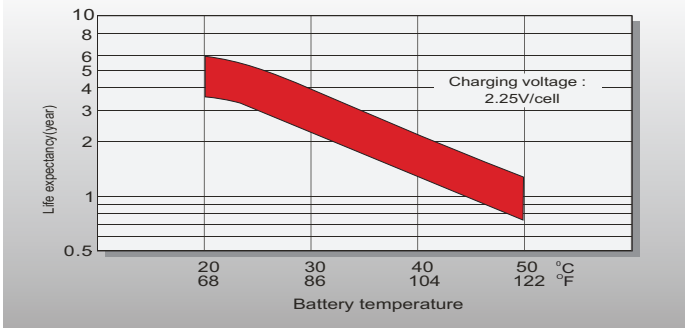
Float Charging Characteristics



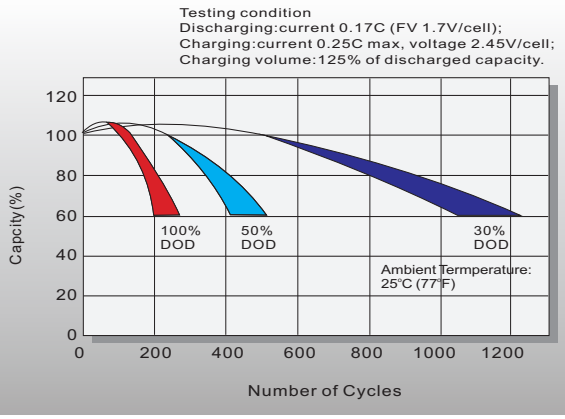
Temperature Effects in Relation to Battery Capacity



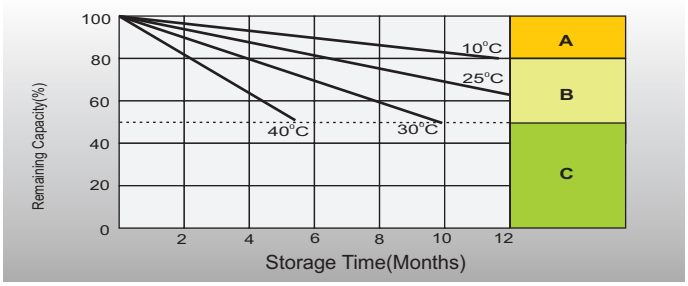
Effect of Temperature on Long Term Float Life



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.

Sales Office

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

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