

### Features

#### Heavy Duty Multi-Purpose Series:

- Provides extended life in applications where variety and combination of general cycling, standby, and wider temperature fluctuation environments.
- 5 year service life in standby applications at 25° C temperatures.
- Cycles over 300 times at 60% depth of discharge yet will perform equally well in standby and other applications where both conditions are required.
- Valve Regulated Lead Acid (VRLA), Absorbent Glass Mat (AGM) Technology – Safe operation in any position
- Lead-calcium alloy grids and the use of high purity virgin lead
- Externally sealed Flame retardant ABS case and cover to UL94-HB specifications
- UL recognized (UR) as a component in UL approved equipment installations under File number MH46202
- Classified as non-spillable status for transportation making it non-hazardous for normal transportation processes. Approved for transport by air. Fulfills US D.O.T., I.A.T.A., F.A.A., C.A.B. handling and shipping requirements
- For more details on special design and construction details see Features and Benefits publication on [www.oraclebattery.com](http://www.oraclebattery.com)

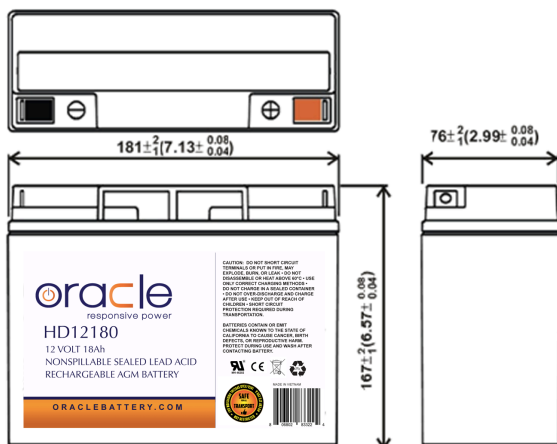


### Specification

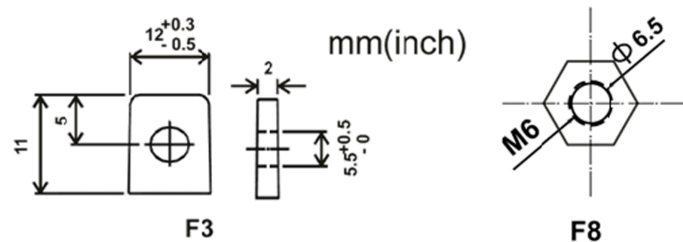
|                                   |   |  |
|-----------------------------------|---|--|
| <b>Cell per unit</b>              | 6   | <b>Ambient Temperature</b>                       |
| <b>Nominal Voltage (V)</b>        | 12  | Charge 0°C (32°F) to 40°C (104°F)                |
| <b>Nominal Capacity (Ah)</b>      | 18Ah @ 20 hour rate to 1.75vpc                  | Discharge -15°C (5°F) to 50°C (122°F)            |
| <b>Weight</b>                     | Approx 5.75kg (12.67lbs.)                       | Storage -15°C (5°F) to 40°C (104°F)              |
| <b>Internal Resistance (1KHz)</b> | 15mΩ  | <b>Max Charge Current</b>                        |
| <b>Max Discharge Current (5s)</b> | 270A (5s)                                       | Max charge current 5.4A                          |
| <b>Battery Life</b>               | Stand by : 3~5 years                            | <b>Cycle use:</b> Charge voltage: 14.4 to 15.0V  |
| <b>Terminal Type</b>              | NB(F3)/IT(F8)                                   | <b>Stand by:</b> Charge voltage: 13.50 to 13.80V |
| <b>Container Material</b>         | ABS 94-HB flame retardant case (94V-0 Optional) |  |



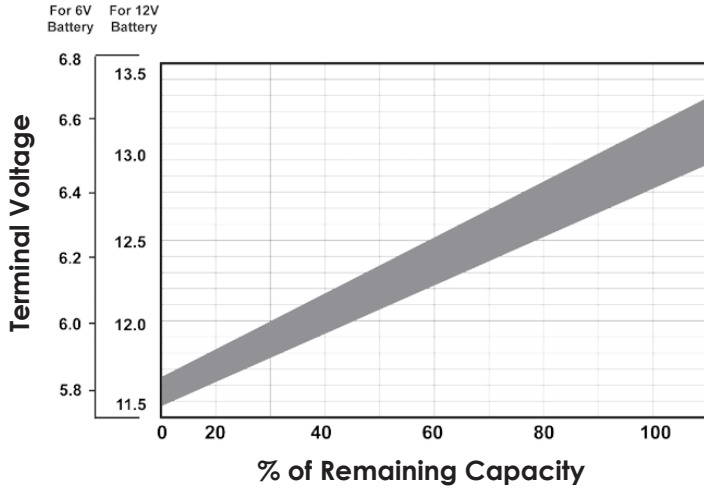
### Dimensions



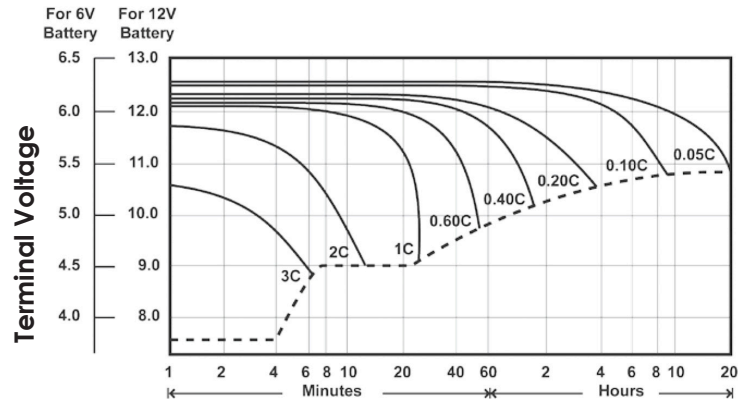
|           | Length    | Width     | Height    | Total Height |
|-----------|-----------|-----------|-----------|--------------|
| Unit mm   | 181±1     | 76±1      | 67±1      | 167±1        |
| Unit inch | 7.13±0.04 | 2.99±0.04 | 6.57±0.04 | 6.57±0.04    |



## Terminal Voltage



## Discharge Times



Time to Ending Voltage

## Charge Voltages

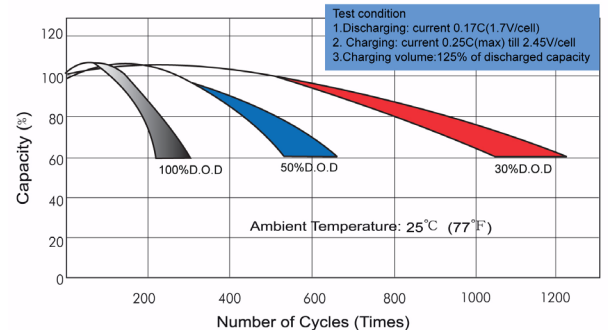
| Average Temperature | Cycle Charging Volts Per Cell | Float Charging Volts Per Cell |
|---------------------|-------------------------------|-------------------------------|
| -40°C (-40°F)       | 2.85-2.95                     | 2.38-2.43                     |
| -20°C (-4°F)        | 2.67-2.77                     | 2.34-2.39                     |
| -10°C (14°F)        | 2.61-2.71                     | 2.32-2.37                     |
| 0°C (32°F)          | 2.55-2.65                     | 2.30-2.35                     |
| 10°C (50°F)         | 2.49-2.59                     | 2.28-2.33                     |
| 20°C (68°F)         | 2.43-2.53                     | 2.26-2.31                     |
| 25°C (77°F)         | 2.40-2.50                     | 2.25-2.30                     |
| 30°C (86°F)         | 2.37-2.47                     | 2.24-2.29                     |
| 40°C (104°F)        | 2.31-2.41                     | 2.22-2.27                     |
| 50°C (122°F)        | 2.25-2.35                     | 2.20-2.25                     |

Temperature Compensated Charging

## Temperature Storage

| Average Storage Temperature | Recharging Interval |
|-----------------------------|---------------------|
| 68°F                        | Every 9 months      |
| 77°F                        | Every 6 months      |
| 95°F                        | Every 3 months      |

## Cycle Life



## Constant Current Discharge Characteristics (25°C 77°F)

| F.V/Time | 5MIN  | 15MIN | 30MIN | 60MIN | 2HR  | 3HR  | 5HR  | 8HR  | 10HR | 20HR |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.60V    | 70.50 | 33.00 | 20.10 | 10.80 | 6.31 | 4.85 | 3.16 | 2.13 | 1.84 | 1.00 |
| 1.67V    | 65.90 | 32.00 | 19.30 | 10.70 | 6.94 | 4.76 | 3.14 | 2.13 | 1.80 | 0.97 |
| 1.70V    | 60.60 | 31.00 | 17.50 | 10.30 | 6.20 | 4.73 | 3.11 | 2.11 | 1.76 | 0.95 |
| 1.75V    | 60.10 | 30.20 | 16.70 | 10.10 | 6.12 | 3.64 | 3.08 | 2.10 | 1.73 | 0.94 |
| 1.80V    | 53.00 | 27.30 | 15.40 | 9.40  | 5.94 | 4.52 | 3.02 | 2.10 | 1.72 | 0.92 |