

# VO SERIES (5yr Design Life in Float Service at 20°C)

| Dimensions (mm)         |                              |            |
|-------------------------|------------------------------|------------|
|                         |                              |            |
| Standard Terminal (mm)  |                              |            |
|                         |                              |            |
| Physical Specification  |                              |            |
| Nominal Voltage         | 6V                           |            |
| Nominal Capacity (20HR) | 12.0 AH                      |            |
| Dimension               | Length                       | 151 ± 2 mm |
|                         | Width                        | 51 ± 2 mm  |
|                         | Container Height             | 94 ± 2 mm  |
|                         | Total Height (with terminal) | 100 ± 2 mm |
| Weight                  | Approx 1.80kg                |            |
| Standard Terminal       | F1                           |            |
| Case and Cover Material | ABS (UL94-V0)                |            |

## PS-6120 VO 6V 12AH

| Operating Temperature Range            |                       |                |                         |  |  |
|--|-----------------------|----------------|-------------------------|--|--|
| Storage (In fully charged condition)   | - 20°C to + 60°C      |                |                         |  |  |
| Charge                                 | - 15°C to + 50°C      |                |                         |  |  |
| Discharge                              | - 20°C to + 60°C      |                |                         |  |  |
| Discharge Characteristics (25°C, 77°F) |                       |                |                         |  |  |
| Rated Capacity                         | 20h Rate (1.80V/cell) | 12.00AH        | Constant Voltage Charge | Cycle  | Initial Charging Current<br>Less than 2.50A<br>Voltage 7.20V ~ 7.50V<br>at 25°C (77°F) |
|  | 10h Rate (1.80V/cell) | 11.2AH         |                         |  |  |
|  | 5h Rate (1.75V/cell)  | 10.2AH         |                         |  |  |
|  | 3h Rate (1.75V/cell)  | 9.2AH          |                         |  |  |
| Capacity Affected by Temperature       | 1h Rate (1.60V/cell)  | 7.54AH         | Standby                 | Recommended Charge<br>Current less than 2.50A<br>Voltage 6.75V ~ 6.90V<br>at 25°C (77°F) |  |
|  | 40°C (104°F)          | 103%           |                         |  |  |
|  | 25°C (77°F)           | 100%           |                         |  |  |
|  | 0°C (32°F)            | 86%            |                         |  |  |
| Internal Resistance mΩ                 |                       | Approx 15.0 mΩ |                         |  |  |

| 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   | 22.9 | 17.5  | 14.5  | 12.6  | 9.72  | 7.16  | 6.03 | 3.57 | 2.79 | 2.27 | 1.85 | 1.61 | 1.30 | 1.08 | 0.594 |
| 1.80V/cell   | 30.7 | 22.4  | 17.6  | 14.9  | 11.5  | 8.33  | 6.76 | 3.90 | 3.00 | 2.42 | 1.99 | 1.72 | 1.37 | 1.12 | 0.600 |
| 1.75V/cell   | 34.6 | 24.6  | 19.2  | 16.0  | 11.9  | 8.64  | 7.07 | 4.04 | 3.06 | 2.48 | 2.04 | 1.77 | 1.40 | 1.15 | 0.606 |
| 1.70V/cell   | 38.1 | 26.9  | 20.5  | 16.8  | 12.4  | 8.99  | 7.29 | 4.14 | 3.15 | 2.54 | 2.09 | 1.81 | 1.42 | 1.17 | 0.617 |
| 1.65V/cell   | 42.0 | 29.0  | 21.8  | 17.8  | 13.1  | 9.21  | 7.46 | 4.20 | 3.28 | 2.63 | 2.15 | 1.85 | 1.44 | 1.19 | 0.625 |
| 1.60V/cell   | 46.3 | 31.5  | 23.3  | 19.0  | 13.8  | 9.60  | 7.54 | 4.38 | 3.38 | 2.71 | 2.22 | 1.89 | 1.45 | 1.21 | 0.629 |
| 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   | 41.8 | 32.4  | 27.1  | 23.7  | 18.5  | 13.8  | 11.6 | 6.93 | 5.44 | 4.44 | 3.63 | 3.16 | 2.56 | 2.14 | 1.18  |
| 1.80V/cell   | 55.5 | 40.9  | 32.3  | 27.6  | 21.5  | 15.9  | 13.0 | 7.51 | 5.82 | 4.71 | 3.88 | 3.37 | 2.71 | 2.21 | 1.19  |
| 1.75V/cell   | 61.2 | 44.3  | 34.9  | 29.4  | 22.2  | 16.3  | 13.5 | 7.76 | 5.91 | 4.80 | 3.97 | 3.46 | 2.75 | 2.26 | 1.20  |
| 1.70V/cell   | 65.6 | 47.1  | 36.7  | 30.7  | 22.9  | 16.9  | 13.9 | 7.94 | 6.06 | 4.92 | 4.06 | 3.52 | 2.78 | 2.31 | 1.22  |
| 1.65V/cell   | 71.3 | 50.4  | 38.7  | 32.3  | 24.0  | 17.2  | 14.1 | 8.01 | 6.29 | 5.07 | 4.16 | 3.59 | 2.82 | 2.35 | 1.23  |
| 1.60V/cell   | 76.8 | 53.5  | 40.8  | 34.1  | 25.2  | 17.8  | 14.2 | 8.31 | 6.45 | 5.21 | 4.28 | 3.65 | 2.84 | 2.37 | 1.24  |