## MODEL: MC9-12



Plane Chart:
Unit:(mm) Terminal type:(F2)


## Parameter Chart:

| Volts |  | 12 V |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Capacity ( $25^{\circ} \mathrm{C}$ ) |  | 20 hours rate (0.45A) |  | 9Ah |
| Discharge Current Testing ( $25^{\circ} \mathrm{C}$ ) |  | $20 \mathrm{I}_{20}$ rate (9A,27min) |  | 34 min |
|  |  | $60 \mathrm{I}_{20}$ rate (27A, 7 min ) |  | 8 min |
| Internal Resistance |  | Full Charged Battery $25^{\circ} \mathrm{C}$ |  | $18 \mathrm{~m} \Omega$ |
| Capacity Affected By Temperature |  | $40^{\circ} \mathrm{C}$ |  | 104\% |
|  |  | $25^{\circ} \mathrm{C}$ |  | 100\% |
|  |  | $0^{\circ} \mathrm{C}$ |  | 83\% |
|  |  | $-15^{\circ} \mathrm{C}$ |  | 65\% |
| Residual Capacity$\left(25^{\circ} \mathrm{C}\right)$ |  | Capacity After 3 Months Storage |  | 91\% |
|  |  | Capacity After 6 Months Storage |  | 82\% |
|  |  | Capacity After 12 Months Storage |  | 65\% |
| Charge (Constant Voltage) | Cycle ( $25^{\circ} \mathrm{C}$ ) |  | Initial Charging Current Less Than 2.7A Voltage 14.5~14.9V |  |
|  | Float ( $25^{\circ} \mathrm{C}$ ) |  | Charge Voltage 13.6~13.8V |  |
| Weight (Approx) |  |  |  | 2.40 Kg |

$\star$ The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values

Residual Capacity


Discharge Current $25^{\circ} \mathrm{C}$


## MODEL: MC9-12

Constant voltage charging characteristics


Float Life


Constant Current Discharge Characteristics (A, $\mathbf{2 5}^{\circ} \mathbf{C}$ )

| F.V/Time | 5 min | 10 min | 15 min | 30 min | 60 min | 2 h | 3 h | 5 h | 8 h | 10 h | 20 h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.60 V | 38.2 | 23.8 | 18.2 | 10.3 | 5.81 | 3.26 | 2.35 | 1.51 | 1.00 | 0.81 | 0.45 |
| 10.2 V | 34.6 | 22.7 | 17.1 | 10.0 | 5.69 | 3.17 | 2.32 | 1.49 | 0.99 | 0.80 | 0.44 |
| 10.5 V | 33.2 | 21.6 | 16.6 | 9.7 | 5.56 | 3.12 | 2.28 | 1.48 | 0.98 | 0.79 | 0.43 |
| 10.8 V | 31.3 | 20.3 | 16.1 | 9.5 | 5.47 | 3.07 | 2.25 | 1.46 | 0.97 | 0.78 | 0.43 |

Constant Current Discharge Characteristics (Watt, $\mathbf{2 5}^{\circ} \mathrm{C}$ )

| F.V/Time | 5 min | 10 min | 15 min | 30 min | 60 min | 2 h | 3 h | 5 h | 8 h | 10 h | 20 h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.60 V | 412.6 | 259.4 | 200.2 | 115.4 | 66.3 | 37.5 | 27.3 | 17.70 | 11.82 | 9.56 | 5.37 |
| 10.2 V | 380.6 | 252.0 | 191.5 | 113.0 | 64.9 | 36.5 | 26.9 | 17.47 | 11.71 | 9.44 | 5.24 |
| 10.5 V | 368.5 | 241.9 | 187.6 | 110.6 | 63.9 | 36.5 | 26.7 | 17.50 | 11.69 | 9.40 | 5.12 |
| 10.8 V | 350.6 | 229.4 | 183.5 | 109.3 | 62.9 | 35.9 | 26.3 | 17.26 | 11.54 | 9.28 | 5.12 |

## Capacity Factors With Different Temperature

| Battery Type |  | $-20^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ | $0^{\circ} \mathrm{C}$ | $5^{\circ} \mathrm{C}$ | $10^{\circ} \mathrm{C}$ | $20^{\circ} \mathrm{C}$ | $25^{\circ} \mathrm{C}$ | $30^{\circ} \mathrm{C}$ | $40^{\circ} \mathrm{C}$ | $45^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Battery | 12 V | $50 \%$ | $70 \%$ | $83 \%$ | $85 \%$ | $90 \%$ | $98 \%$ | $100 \%$ | $102 \%$ | $104 \%$ | $105 \%$ |

$\star$ The above are average and data obtained from the first 3 charge/discharge cycles. These are not minimum values.

