| MT121050 |
| :--- | :--- | :--- | :--- |
| 12 Volts 105 Ah |$\quad$| MT121050 having its design life of 12 years $@ 20^{\circ} \mathrm{C}$ for floating |
| :--- |
| application and around 1800 cycles for $30 \%$ depth of discharge for cyclic |

Specification

| Nominal voltage | 12 Volts |
| :--- | :--- |
| Capacity | 105 Ampere hours @ $20^{\circ} \mathrm{C}, 10$ hours rated (cut off voltage $\left.1.80 \mathrm{~V} / \mathrm{Cell}\right)$ |
| Dimension | L: $330 \mathrm{~mm} \quad \mathrm{~W}: 171 \mathrm{~mm} \mathrm{H}: 214 \mathrm{~mm} \quad \mathrm{TH}: 224 \mathrm{~mm}$ |
| Weight approx. | 29.5 kg or 65.1 pounds |
| Internal resistance | Approx. $4.5 \mathrm{~m} \Omega$ |
| Self-discharge rate | Approx. $3 \%$ per month @ $25^{\circ} \mathrm{C}$ |
| Operation temperature range | Discharged: $-15^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
|  | Charging: $5^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$ |
|  | Storage: $0^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
| Floating charge voltage | 13.50 to 13.80 Volts $\left(-15 \mathrm{mv} /{ }^{\circ} \mathrm{C}\right)$ |
| Cyclic charging voltage | 14.50 to 14.90 Volts $\left(-20 \mathrm{mv} /{ }^{\circ} \mathrm{C}\right)$ |
| Maximum charging currant | 30 Ampere $(\mathrm{A})$ |
| Boost/equalizing charge | Not required |
| Terminal type | Copper $-\mathrm{T} 5 / \mathrm{T} 9$ |
| Container material | General ABS resin |



Open Circuit Voltage vs Residual Capacity $\left(25^{\circ} \mathrm{C}\right)$


Constant Current Discharge Characteristics (A, $25^{\circ} \mathrm{C}$ )

| FV/TIME | 5 min | 10 min | 15 min | 30 min | 60 min | 3 h | 5 h | 10 h | 20 h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.60 V | 321 | 221 | 175 | 108 | 65.3 | 26.5 | 18.5 | 10.3 | 5.38 |
| 10.20 V | 305 | 210 | 168 | 104 | 62.7 | 26.1 | 18.2 | 10.2 | 5.38 |
| 10.80 V | 287 | 196 | 160 | 99.2 | 59.6 | 25.6 | 17.8 | 10.0 | 5.33 |

Constant Power Discharge Characteristics (Watt, $25^{\circ} \mathrm{C}$ )

| FV/TIME | 5 min | 10 min | 15 min | 30 min | 60 min | 3 h | 5 h | 10 h | 20 h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.60 V | 3376 | 2387 | 1931 | 1218 | 744 | 311 | 220 | 123 | 64.5 |
| 10.20 V | 3207 | 2268 | 1854 | 1172 | 714 | 307 | 216 | 122 | 64.5 |
| 10.80 V | 3018 | 2127 | 1765 | 1114 | 679 | 301 | 211 | 119 | 63.9 |

