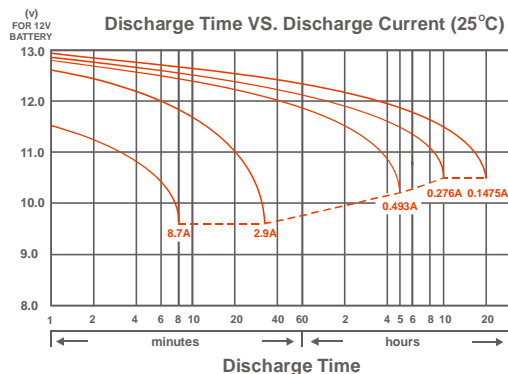
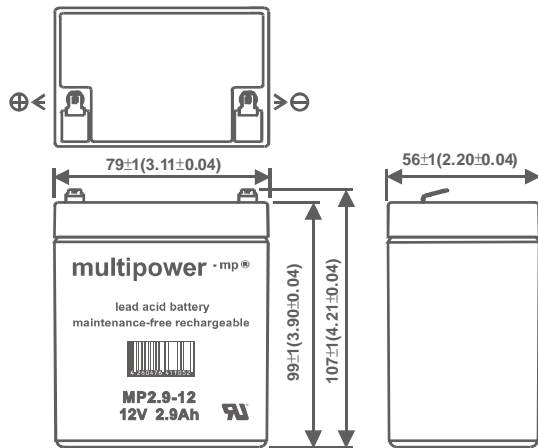
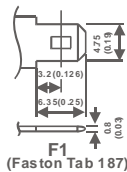


multipower - mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MP2,9-12

Nominal Voltage(V) 12V

Nominal Capacity

| | | | | |
|--------------|---------|----|---------|---------|
| 20 hour rate | (0.145A | to | 10.50V) | 2.900Ah |
| 10 hour rate | (0.276A | to | 10.50V) | 2.755Ah |
| 5 hour rate | (0.493A | to | 10.20V) | 2.465Ah |
| 1 C | (2.9A | to | 9.60V) | 1.643Ah |
| 3 C | (8.7A | to | 9.60V) | 1.160Ah |

Weight Approx. 1.19kg (2.62Lbs.)

Internal Resistance (at 1KHz) Approx. 33 mΩ

Maximum Discharge Current for

5 seconds: 43.5A

Charging Methods at 25°C (77°F)

| | |
|----------------------------|---------------|
| Cycle use: | |
| Charging Voltage | 14.7 to 14.8V |
| Coefficient -5.0mV/°C/cell | |
| Maximum Charging Current: | 0.87A |
| Standby use: | |
| Float Charging Voltage | 13.5 to 13.8V |
| Coefficient -3.0mV/°C/cell | |

Operating Temperature Range

| | |
|-----------|-----------------------------|
| Charge | -15°C (5°F) to 40°C (104°F) |
| Discharge | -15°C (5°F) to 50°C (122°F) |
| Storage | -15°C (5°F) to 40°C (104°F) |

Charge Retention (shelf life) at 20°C (68°F)

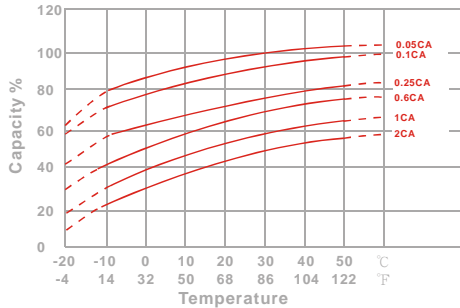
| | |
|---------|-----|
| 1 month | 92% |
| 3 month | 90% |
| 6 month | 80% |

Case Material ABS UL94 HB

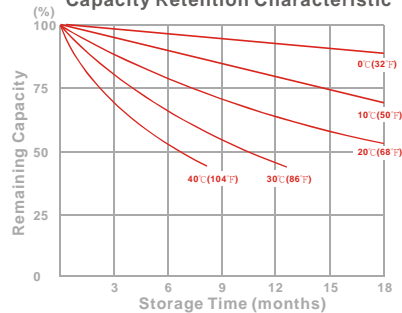
Terminal F1(Faston Tab 187)

CHARACTERISTIC & PERFORMANCE DATA

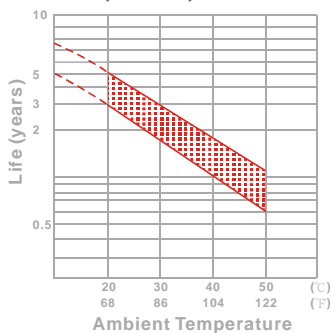
Effect of Temperature on Capacity 25°C(77°F)



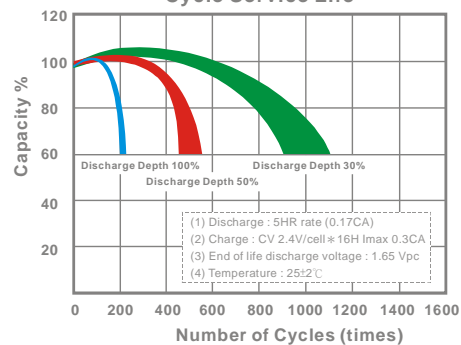
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | | | | | | | | |
| 5 | min | 14.6 | 16.7 | 18.1 | 19.2 | 19.5 | 20.0 | 20.7 |
| 10 | min | 11.0 | 12.6 | 13.3 | 13.8 | 14.0 | 14.2 | 14.6 |
| 15 | min | 8.53 | 9.60 | 9.98 | 10.2 | 10.3 | 10.5 | 10.6 |
| 30 | min | 5.07 | 5.45 | 5.63 | 5.78 | 5.83 | 5.90 | 5.98 |
| 60 | min | 3.13 | 3.32 | 3.47 | 3.58 | 3.62 | 3.67 | 3.72 |
| 120 | min | 1.86 | 2.00 | 2.06 | 2.12 | 2.14 | 2.17 | 2.20 |
| 180 | min | 1.36 | 1.49 | 1.52 | 1.55 | 1.56 | 1.57 | 1.59 |
| 240 | min | 1.09 | 1.18 | 1.21 | 1.23 | 1.24 | 1.25 | 1.26 |
| 300 | min | 0.898 | 0.977 | 1.01 | 1.04 | 1.05 | 1.06 | 1.07 |
| 600 | min | 0.520 | 0.557 | 0.572 | 0.583 | 0.587 | 0.592 | 0.597 |
| 1200 | min | 0.285 | 0.297 | 0.303 | 0.308 | 0.310 | 0.312 | 0.313 |

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

| End Voltage | | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time | | | | | | | | |
| 5 | min | 11.0 | 11.3 | 11.5 | 11.7 | 11.9 | 12.0 | 12.3 |
| 10 | min | 6.47 | 7.16 | 7.39 | 7.58 | 7.65 | 7.74 | 7.86 |
| 15 | min | 5.04 | 5.30 | 5.42 | 5.53 | 5.57 | 5.62 | 5.68 |
| 30 | min | 2.87 | 3.02 | 3.09 | 3.15 | 3.17 | 3.20 | 3.24 |
| 60 | min | 1.67 | 1.78 | 1.83 | 1.86 | 1.87 | 1.89 | 1.91 |
| 120 | min | 0.921 | 0.984 | 1.018 | 1.049 | 1.062 | 1.079 | 1.102 |
| 180 | min | 0.647 | 0.701 | 0.726 | 0.748 | 0.757 | 0.767 | 0.782 |
| 240 | min | 0.521 | 0.559 | 0.582 | 0.601 | 0.607 | 0.615 | 0.623 |
| 300 | min | 0.474 | 0.493 | 0.506 | 0.515 | 0.519 | 0.524 | 0.529 |
| 600 | min | 0.268 | 0.277 | 0.283 | 0.288 | 0.289 | 0.291 | 0.293 |
| 1200 | min | 0.142 | 0.146 | 0.149 | 0.151 | 0.152 | 0.153 | 0.154 |

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)