

Cod. 00412052

VRLA BATTERY AGM TECHNOLOGY

Revision 4.0

Specifications

Nominal Voltage (V) 12V

Nominal Capacity

| | | |
|--------------|--------------------|----------------|
| 20 hour rate | (0.25A to 10.50V) | 5Ah |
| 10 hour rate | (0.475A to 10.50V) | 4.75Ah |
| 5 hour rate | (0.85A to 10.20V) | 4.25Ah |
| 1 C | (5A to 9.60V) | 2.833Ah |
| 3 C | (15A to 9.60V) | 2.0Ah |

Weight Approx. 1.9kg (4.18 Lbs.)

Internal Resistance (at 1KHz) Approx. 19 mΩ

Maximum Discharge Current for

5 seconds: 100A

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mv/°C/cell

Maximum Charging Current: 1.5A

Standby use:

Float Charging Voltage 13.50 to 13.80V

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 | 98% |
| 3 month | 94% |
| 6 month | 85% |

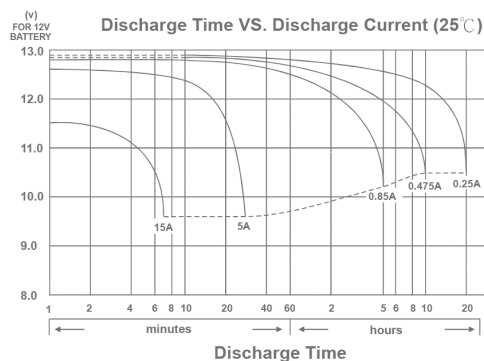
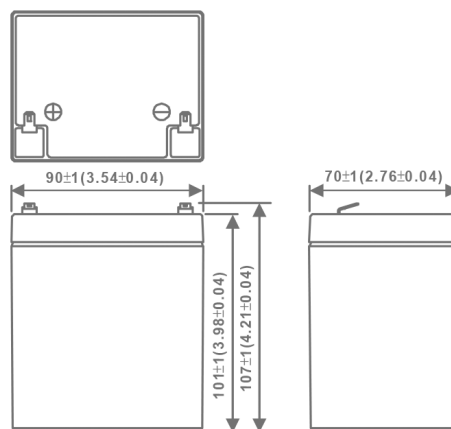
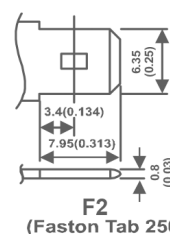
Case Material ABS UL94HB

(Option: ABS UL94 V-0 flame retardant)

Terminal F2 (Faston Tab 187 or 250)

ENERGY SAFE

Dimensions mm (inch)

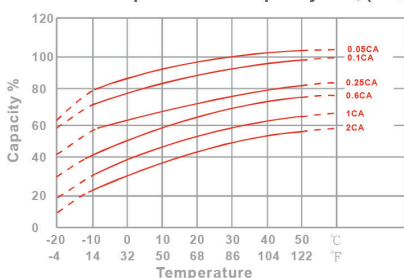


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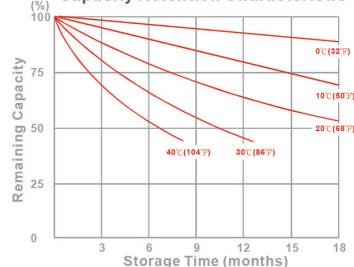
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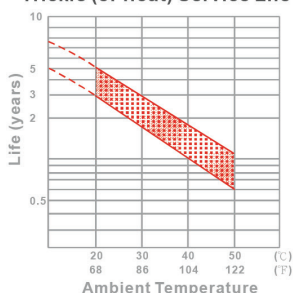
Effect of Temperature on Capacity 25°C (77°F)



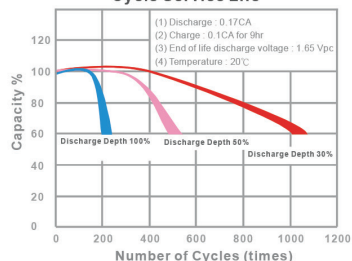
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



PERFORMANCE DATA

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

| Time | End Voltage | 11.10V | 10.80V | 10.50V | 10.20V | 9.90V | 9.60V |
|------|-------------|--------|--------|--------|--------|-------|-------|
| 5 | min | 280 | 299 | 306 | 307 | 309 | 311 |
| 10 | min | 180 | 192 | 196 | 197 | 198 | 200 |
| 15 | min | 133 | 141 | 144 | 145 | 146 | 147 |
| 30 | min | 70.4 | 74.8 | 76.3 | 76.7 | 77.1 | 77.7 |
| 60 | min | 35.7 | 38.6 | 40.7 | 41.4 | 42.1 | 42.7 |
| 120 | min | 18.8 | 20.3 | 21.5 | 21.8 | 22.2 | 22.5 |
| 180 | min | 15.0 | 16.2 | 17.1 | 17.4 | 17.7 | 18.0 |
| 240 | min | 12.1 | 13.0 | 13.7 | 14.0 | 14.2 | 14.4 |
| 300 | min | 10.2 | 11.1 | 11.7 | 11.9 | 12.1 | 12.3 |
| 600 | min | 6.05 | 6.53 | 6.90 | 7.02 | 7.14 | 7.24 |
| 1200 | min | 3.18 | 3.43 | 3.62 | 3.68 | 3.75 | 3.80 |

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

| Time | End Voltage | 11.10V | 10.80V | 10.50V | 10.20V | 9.90V | 9.60V |
|------|-------------|--------|--------|--------|--------|-------|-------|
| 5 | min | 25.0 | 26.7 | 27.3 | 27.4 | 27.6 | 27.8 |
| 10 | min | 15.6 | 16.7 | 17.1 | 17.1 | 17.2 | 17.4 |
| 15 | min | 11.3 | 12.0 | 12.3 | 12.3 | 12.4 | 12.5 |
| 30 | min | 5.94 | 6.31 | 6.44 | 6.48 | 6.51 | 6.55 |
| 60 | min | 3.00 | 3.24 | 3.42 | 3.48 | 3.54 | 3.59 |
| 120 | min | 1.58 | 1.70 | 1.80 | 1.83 | 1.86 | 1.89 |
| 180 | min | 1.25 | 1.35 | 1.43 | 1.45 | 1.48 | 1.50 |
| 240 | min | 1.00 | 1.08 | 1.14 | 1.16 | 1.18 | 1.20 |
| 300 | min | 0.85 | 0.92 | 0.97 | 0.99 | 1.00 | 1.02 |
| 600 | min | 0.50 | 0.54 | 0.57 | 0.58 | 0.59 | 0.60 |
| 1200 | min | 0.26 | 0.28 | 0.30 | 0.30 | 0.31 | 0.31 |

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

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