

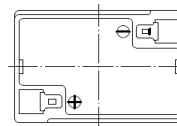
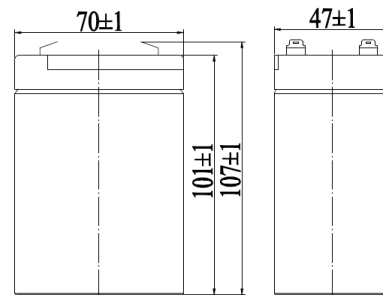
BW 645 (6V4.5Ah)

SPECIFICATIONS

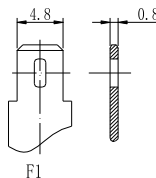
| | | |
|---|--------------|---|
| Nominal Voltage | | 6 V |
| Capacity (25C°) | 20HR | 4.5 Ah |
| | 10HR | 4.2 Ah |
| | 1HR | 2.95 Ah |
| Dimension | Length | 70±1mm (2.76inch) |
| | Width | 47±1mm (1.85inch) |
| | Height | 101±1mm (3.98inch) |
| | Total Height | 107±1mm (4.21inch) |
| Approx. Weight | | 0.68kg (1.50lbs)±5% |
| Terminal type | | F1 |
| Internal resistance (Fully charged, 25C°) | | Approx. 25mΩ |
| Capacity affected by temperature (20HR) | 40C° | 102% |
| | 25C° | 100% |
| | 0C° | 85% |
| | -15C° | 65% |
| Self-discharge (25C°) | 3 month | Remaining Capacity: 91% |
| | 6 month | Remaining Capacity: 82% |
| | 12 month | Remaining Capacity: 65% |
| Nominal operating temperature | | 25C°±3C°(77F°±5F°) |
| Operating temperature range | Discharge | -15C° ~ 50C°(5F° ~ 122F°) |
| | Charge | -10C° ~ 50C°(14F° ~ 122F°) |
| | Storage | -20C° ~ 50C°(-4F° ~ 122F°) |
| Float charging voltage(25C°) | | 6.80 to 6.90V Temperature compensation: -9mV/C° |
| Cyclic charging voltage(25C°) | | 7.25 to 7.50V Temperature compensation: -15mV/C° |
| Maximum charging current | | 1.35A |
| Maximum discharge current | | 67.5A(5 sec.) |
| Designed floating life(20C°) | | 5 years |



DIMENSIONS



TERMINAL



CONSTRUCTION

| Component | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide | Lead | ABS | ABS | AGM | Sulfuric acid | Rubber | Copper |

CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25C°)

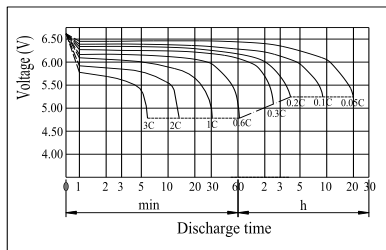
| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|-------|
| 4.80V | 17.2 | 10.9 | 8.51 | 4.79 | 2.95 | 1.61 | 1.12 | 0.92 | 0.78 | 0.43 | 0.228 |
| 4.95V | 16.7 | 10.6 | 8.30 | 4.70 | 2.90 | 1.60 | 1.11 | 0.92 | 0.78 | 0.42 | 0.227 |
| 5.10V | 16.0 | 10.13 | 7.99 | 4.55 | 2.83 | 1.59 | 1.10 | 0.91 | 0.77 | 0.42 | 0.226 |
| 5.25V | 15.3 | 9.69 | 7.72 | 4.44 | 2.77 | 1.56 | 1.09 | 0.90 | 0.77 | 0.42 | 0.225 |
| 5.40V | 14.4 | 9.15 | 7.31 | 4.28 | 2.69 | 1.52 | 1.06 | 0.88 | 0.75 | 0.41 | 0.221 |

CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25°C)

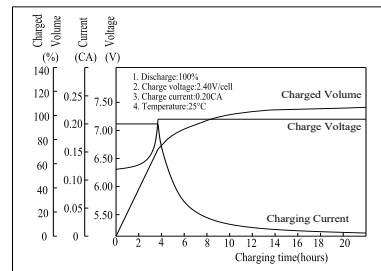
| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 4.80V | 95.9 | 61.4 | 48.5 | 27.46 | 17.07 | 9.43 | 6.63 | 5.49 | 4.69 | 2.56 | 1.37 |
| 4.95V | 93.0 | 59.6 | 47.3 | 26.91 | 16.81 | 9.38 | 6.59 | 5.46 | 4.66 | 2.55 | 1.36 |
| 5.10V | 89.2 | 57.1 | 45.6 | 26.09 | 16.38 | 9.29 | 6.54 | 5.42 | 4.63 | 2.53 | 1.36 |
| 5.25V | 85.4 | 54.7 | 44.0 | 25.46 | 16.06 | 9.15 | 6.50 | 5.39 | 4.59 | 2.52 | 1.35 |
| 5.40V | 80.6 | 51.6 | 41.7 | 24.52 | 15.56 | 8.92 | 6.30 | 5.22 | 4.46 | 2.47 | 1.32 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

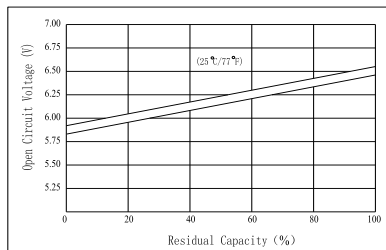
Discharge Characteristics (25°C)



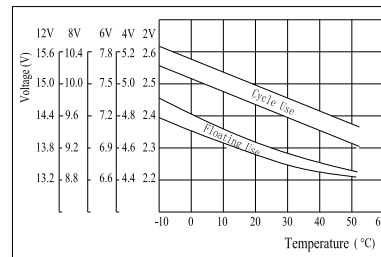
Charging Characteristics (25°C)



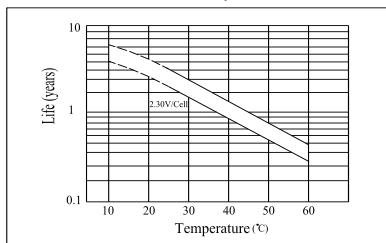
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



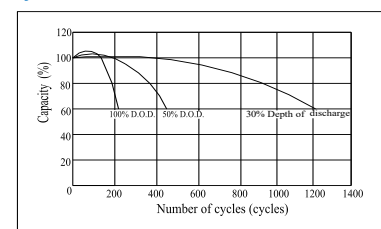
The Relationship for Charging Voltage and Temperature



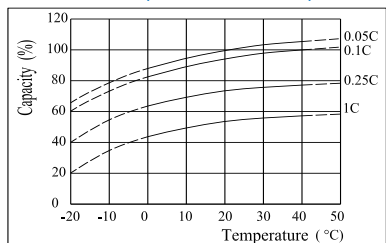
Floating Life on Temperature



Cycle Life on D.O.D (25°C)



Effect of Temperature on Capacity



Self-discharge Characteristics

