# CZV350-2

2V 350AH

**Tubular Gel OPzV**

CANBAT

## CZV350-2

## Physical Specification

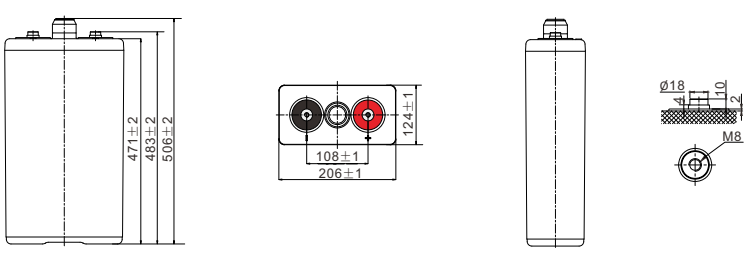
| | |
|---|---|
| Part Number: | **CZV350-2** |
| Length: | **124 ± 2 mm (4.88 inches)** |
| Width: | **206 ± 2 mm (8.11 inches)** |
| Container Height: | **471 ± 2 mm (18.54inches)** |
| Total Height (with terminal): | **506 ± 2 mm (19.92inches)** |
| Approx Weight: | **29.0 kg (63.93 lbs)** |

## Specifications

| | | |
|---|---|---|
| | Nominal Voltage | 2V |
| | (C10, 1.80V/cell) | 350AH |
| **Terminal Option** | M8 | |
| **Container Material** | Standard Option | ABS |
| | Flame Retardant Option (FR) | ABS (UL94:VO) |
| **Rated Capacity** | (10hr,35.0A,1.80V/cell) | 350.0 Ah |
| | (5hr,61.1A,1.75V/cell) | 218.0 Ah |
| | (3hr,90.3A,1.75V/cell) | 270.9 Ah |
| | (1hr,195.3A,1.67V/cell) | 195.3 Ah |
| **Max.Charging Current (25°C)** | 87.5A | |
| **Max Discharge Current (5s)** | 2800A | |
| **Internal Resistance** | Approx. 0.85mΩ | |
| **Discharge Characteristics** | Operating Temp. Range | Discharge: -20°C~55°C (-4°F~131°F) |
| | | Charge: -0°C~40°C (32°F~104°F) |
| | | Storage: -20°C~50°C (-4°F~122°F) |
| | Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) |
| | Charge Voltage (25°C) | Float: 2.25V |
| | | Temp. Coefficient: -3mV/cell/°C |
| | | Cycle(Equalization): 2.35~2.40V |
| | Self Discharge | Less than 3% per month at 25°C |
| | Capacity affected by Temperature | 40°C (104°F) 106% |
| | | 25°C (77°F) 100% |
| | | 0°C (32°F) 86% |
| **Design Floating Life at 25°C** | 20 Years | |
| **Self Discharge** | Canbat Tubular Gel OPzV Batteries may be stored for up to 6 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2% | |

## Dimensions

**M8 Terminal**



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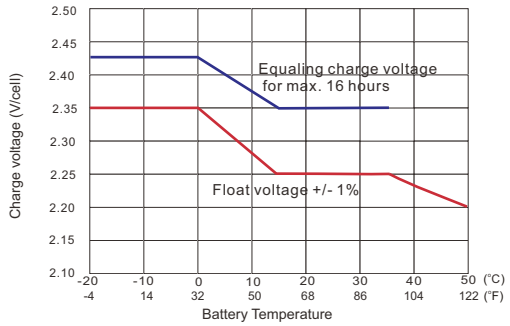
## Constant Current Discharge (Amperes) at 25 °C (77°F )

| F.V/Time | 10min | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h |
|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 274.0 | 253.0 | 206.0 | 156.4 | 105.8 | 81.2 | 55.5 | 38.9 | 32.8 |
| 1.80V/cell | 337.0 | 306.0 | 240.0 | 175.4 | 115.9 | 88.3 | 59.9 | 41.7 | 35.0 |
| 1.75V/cell | 399.0 | 343.0 | 256.0 | 182.3 | 119.9 | 90.3 | 61.1 | 42.4 | 35.6 |
| 1.70V/cell | 448.0 | 374.0 | 271.0 | 190.3 | 122.9 | 92.1 | 62.0 | 43.0 | 36.0 |
| 1.67V/cell | 481.0 | 395.0 | 282.0 | 195.3 | 124.9 | 93.8 | 63.0 | 43.5 | 36.3 |
| 1.60V/cell | 503.0 | 409.0 | 289.0 | 198.3 | 126.9 | 94.9 | 63.6 | 43.8 | 36.6 |

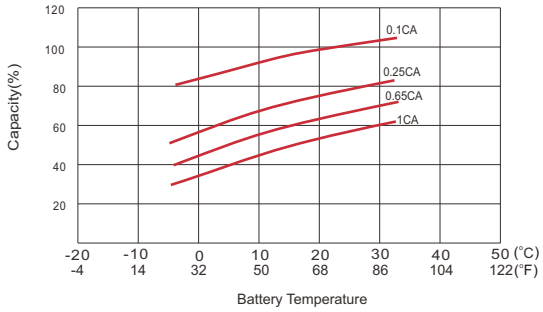
## Constant Power Discharge (Watts/cell) at 25 °C (77°F )

| F.V/Time | 10min | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h |
|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 510.0 | 475.0 | 394.0 | 301.9 | 205.5 | 158.4 | 109.1 | 77.2 | 65.2 |
| 1.80V/cell | 616.0 | 567.0 | 455.0 | 337.7 | 224.6 | 171.4 | 117.1 | 82.5 | 69.5 |
| 1.75V/cell | 717.0 | 626.0 | 480.0 | 348.7 | 229.7 | 174.4 | 119.1 | 83.7 | 70.5 |
| 1.70V/cell | 790.0 | 673.0 | 503.0 | 360.7 | 234.7 | 177.4 | 121.1 | 84.6 | 71.2 |
| 1.67V/cell | 833.0 | 700.0 | 518.0 | 367.6 | 238.8 | 180.4 | 122.1 | 85.4 | 71.8 |
| 1.60V/cell | 855.0 | 715.0 | 526.0 | 371.6 | 240.8 | 181.4 | 123.1 | 85.8 | 72.2 |

## Charge voltage vs ambient temperature curve



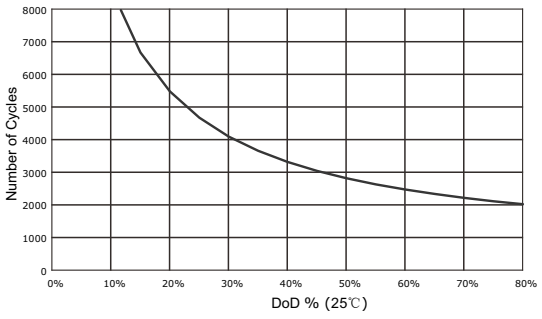

## Temperature effects in relation to battery capacity




## OPzV Tubular Gel Batteries

Canbat OPzV cells are a type of valve regulated sealed lead-acid (VRLA) batteries, designed in Canada with tubular gel technology. They are ideal for applications with discharge over a long period, such as renewable energy, telecom backup, oil and gas, energy storage, railway, emergency lighting and switchgear. Canbat OPzV tubular gel batteries offer high capacity reserve power and deep cycle performance. They also offer a long service life of over 20 years at 20ºC (68ºF) and a reliable maintenance-free and non-spillable construction. OPzV cells are developed with high capacities to give you more options to meet your energy needs. OPzV technology utilizes tubular positive plates and a fixed gel electrolyte, making them the best valve-regulated battery design available. The 2V series of Canbat OPzV batteries are built with monoblock cells (2V/cell), making it easy to group them and create various battery banks of 12V, 24V and 48V.

## Cycle Life in Relation to DOD (C10)




## General Relation of Capacity VS. Storage Time