

## Features

Three difference leg solutions: Radial, Snap in, Screw  
Large Capacity, 2.7V, 3.0V Rated Volts

## Typical Applications

RAM, Detonator, car recorder, smart meter, vacuum switch, digital camera, motor drive, clock circuit, UPS, toy, program-controlled switch, etc.

## General Pictures

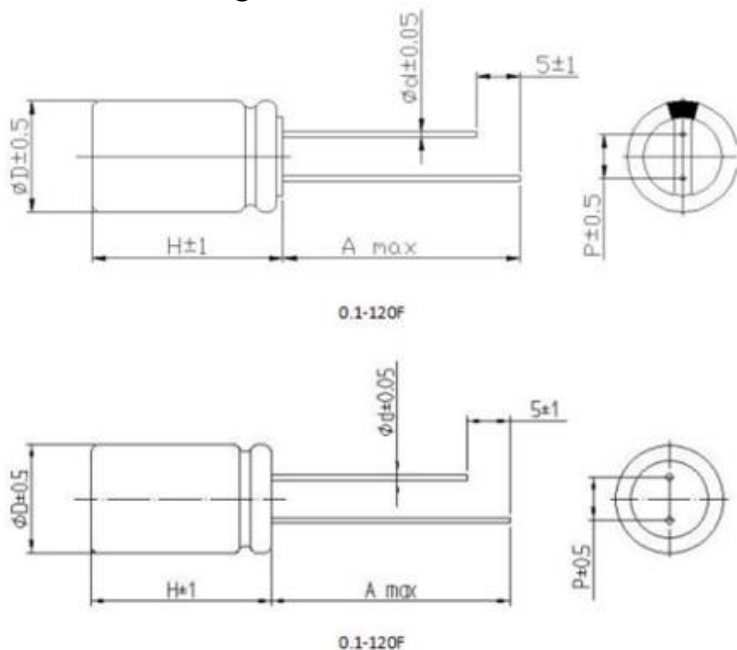
### 2.7V



## Specification

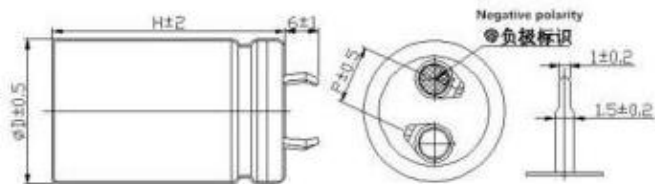
| Series Name                 | HDZ                                                                                                                         |             |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|
| Rated Voltage (DC)          | 2.7V                                                                                                                        | 3.0V        |
| Surge Voltage (DC)          | 2.85V                                                                                                                       | 3.15V       |
| Capacitance Range           | 0.1F~3000F                                                                                                                  | 1F~500F     |
| Operating Temperature Range | -40°C~+70°C                                                                                                                 | -40°C~+65°C |
| Product Life                | Normal temperature cycle life: 25°C, 1 million cycles between VR and 1/2VR, Capacity attenuation≤30%, ESR change≤4 times.   |             |
|                             | High temperature endurance life: maximum temperature retention VR, 1000 hours. Capacity attenuation≤30%, ESR change≤4 times |             |

## General Drawings

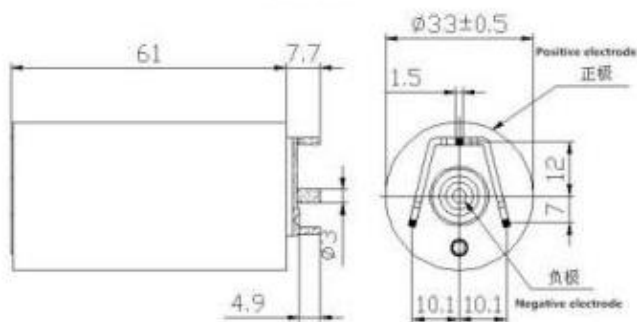


# HDZ - Winding Type Super Capacitor (Radial, Snap in, Screw)

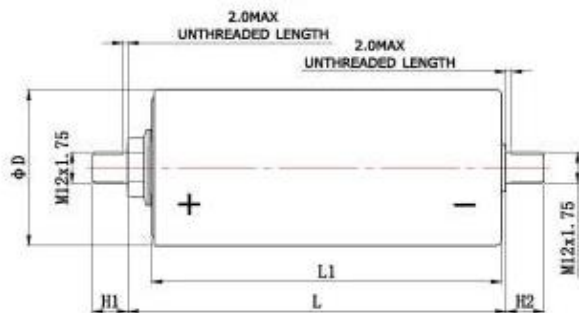
## General Drawings



90-700F



300F



3000F

## 2.7V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 0.1           | 1400             | 700     | 5                 | 12     | 2            |
| 0.1           | 1400             | 700     | 5                 | 10     | 2            |
| 0.15          | 500              | 250     | 5                 | 10     | 2            |
| 0.2           | 1200             | 600     | 5                 | 10     | 2            |
| 0.2           | 400              | 200     | 5                 | 12     | 2            |
| 0.25          | 4000             | 200     | 5                 | 12     | 2            |

## 2.7V Standard Ratings

| Capacity | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|----------|------------------|---------|-------------------|--------|--------------|
|          | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 0.35     | 500              | 250     | 5                 | 12     | 2            |
| 0.5      | 700              | 350     | 6.3               | 10     | 2.5          |
| 0.5      | 700              | 350     | 6.3               | 12.5   | 2.5          |
| 0.7      | 600              | 300     | 8                 | 13     | 3.5          |
| 0.7      | 2600             | 1300    | 4                 | 18     | 1.6          |
| 1        | 600              | 300     | 8                 | 13     | 3.5          |
| 1        | 1100             | 550     | 6.3               | 10     | 2.5          |
| 1        | 1300             | 650     | 6.3               | 12.5   | 2.5          |
| 1.5      | 700              | 350     | 8                 | 13     | 3.5          |
| 1.5      | 600              | 300     | 10                | 13     | 5            |
| 1.5      | 700              | 350     | 6.3               | 14     | 2.5          |
| 1.5      | 500              | 250     | 8                 | 16     | 3.5          |
| 2        | 480              | 240     | 6.3               | 22     | 2.5          |
| 2        | 500              | 250     | 6.3               | 17     | 2.5          |
| 2        | 400              | 200     | 8                 | 16     | 3.5          |
| 2        | 260              | 130     | 8                 | 20     | 3.5          |
| 2        | 240              | 120     | 10                | 20     | 5            |
| 2.2      | 240              | 120     | 10                | 20     | 5            |
| 3        | 500              | 250     | 6.3               | 22     | 2.5          |
| 3.3      | 500              | 250     | 6.3               | 22     | 2.5          |
| 3.3      | 240              | 120     | 8                 | 20     | 3.5          |
| 3.3      | 140              | 70      | 10                | 20     | 5            |
| 4        | 140              | 70      | 10                | 20     | 5            |
| 4        | 200              | 100     | 12.5              | 21     | 5            |

## 2.7V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 4             | 200              | 100     | 8                 | 20     | 3.5          |
| 4.7           | 120              | 60      | 12.5              | 21     | 5            |
| 5             | 180              | 90      | 10                | 20     | 5            |
| 5             | 180              | 90      | 8                 | 24     | 3.5          |
| 5             | 180              | 90      | 8                 | 20     | 3.5          |
| 6             | 120              | 60      | 10                | 25     | 5            |
| 6             | 300              | 150     | 8                 | 24     | 3.5          |
| 6             | 150              | 75      | 10                | 20     | 5            |
| 7             | 160              | 80      | 10                | 20     | 5            |
| 7             | 160              | 80      | 8                 | 30     | 3.5          |
| 8             | 100              | 50      | 12.5              | 21     | 5            |
| 10            | 80               | 40      | 12.5              | 25     | 5            |
| 10            | 80               | 40      | 12.5              | 34     | 5            |
| 10            | 100              | 50      | 10                | 25     | 5            |
| 10            | 110              | 55      | 10                | 30     | 5            |
| 10            | 110              | 55      | 12.5              | 21     | 5            |
| 12            | 80               | 40      | 12.5              | 34     | 5            |
| 12            | 80               | 40      | 12.5              | 21     | 5            |
| 15            | 60               | 30      | 16                | 26     | 7.5          |
| 15            | 70               | 35      | 12.5              | 25     | 5            |
| 15            | 76               | 38      | 12.5              | 34     | 5            |
| 15            | 80               | 40      | 10                | 30     | 5            |
| 16            | 76               | 38      | 16                | 20     | 7.5          |

## 2.7V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 18            | 60               | 30      | 12.5              | 25     | 5            |
| 20            | 46               | 23      | 16                | 34     | 7.5          |
| 20            | 50               | 25      | 16                | 26     | 7.5          |
| 20            | 50               | 25      | 12.5              | 25     | 5            |
| 20            | 50               | 25      | 12.5              | 34     | 5            |
| 25            | 40               | 20      | 16                | 34     | 7.5          |
| 25            | 50               | 25      | 16                | 26     | 7.5          |
| 25            | 60               | 30      | 12.5              | 34     | 5            |
| 30            | 40               | 20      | 16                | 34     | 7.5          |
| 30            | 44               | 22      | 12.5              | 34     | 5            |
| 30            | 44               | 22      | 18                | 26     | 7.5          |
| 30            | 44               | 22      | 16                | 32     | 7.5          |
| 35            | 40               | 20      | 16                | 26     | 7.5          |
| 40            | 40               | 20      | 16                | 34     | 7.5          |
| 40            | 40               | 20      | 18                | 34     | 7.5          |
| 40            | 40               | 20      | 18                | 41     | 7.5          |
| 40            | 40               | 20      | 18                | 41     | 7.5          |
| 50            | 40               | 20      | 18                | 41     | 7.5          |
| 50            | 40               | 20      | 18                | 34     | 7.5          |
| 50            | 40               | 20      | 18                | 34     | 7.5          |
| 60            | 40               | 20      | 18                | 41     | 7.5          |
| 60            | 40               | 20      | 18                | 41     | 7.5          |
| 90            | 30               | 15      | 22                | 46     | 10           |
| 100           | 30               | 15      | 22                | 42     | 10           |

## 2.7V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 100           | 30               | 15      | 22                | 46     | 10           |
| 100           | 30               | 15      | 25.4              | 40     | 10           |
| 120           | 30               | 15      | 25.4              | 54     | 10           |
| 120           | 30               | 15      | 22                | 46     | 10           |
| 120           | 30               | 15      | 25.4              | 40     | 10           |
| 150           | 30               | 15      | 25.4              | 54     | 10           |
| 150           | 30               | 15      | 25.4              | 40     | 10           |
| 180           | 20               | 10      | 25.4              | 54     | 10           |
| 180           | 20               | 10      | 30                | 40     | 10           |
| 200           | 20               | 10      | 35                | 61     | 10           |
| 200           | 20               | 10      | 25.4              | 54     | 10           |
| 200           | 20               | 10      | 30                | 50     | 10           |
| 220           | 20               | 10      | 30                | 50     | 10           |
| 220           | 20               | 10      | 35                | 61     | 10           |
| 240           | 20               | 10      | 30                | 50     | 10           |
| 260           | 20               | 10      | 30                | 50     | 10           |
| 260           | 20               | 10      | 35                | 61     | 10           |
| 300           | 20               | 10      | 35                | 54     | 10           |
| 300           | 20               | 10      | 35                | 61     | 10           |
| 360           | 7                | 3.5     | 35                | 61     | 10           |
| 400           | 20               | 10      | 35                | 61     | 10           |
| 470           | 10               | 5       | 35                | 61     | 10           |
| 500           | 20               | 10      | 35                | 61     | 10           |
| 500           | 2.5              | 1.5     | 33                | 76     | /            |

### 2.7V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 550           | 20               | 10      | 35                | 70     | 10           |
| 600           | 20               | 10      | 35                | 70     | 10           |
| 650           | 10               | 5       | 35                | 96     | 12.7         |
| 700           | 10               | 5       | 35                | 96     | 12.7         |
| 720           | 2                | 1.3     | 33                | 101    | /            |
| 800           | 10               | 5       | 35                | 96     | 12.7         |
| 1000          | 10               | 5       | 51                | 71     | 21.8         |
| 1200          | 6                | 3       | 51                | 108    | 21.8         |
| 1500          | 6                | 3       | 51                | 108    | 21.8         |
| 2000          | 4                | 2       | 51                | 133    | 21.8         |
| 2400          | 4                | 2       | 51                | 133    | 21.8         |
| 3000          | 4                | 2       | 64                | 133    | 28.2         |
| 350           | 3                | 1.6     | 35                | 62     | /            |
| 3000          | 0.29             | 0.25    | 60                | 140    | /            |
| 3000          | 0.29             | 0.25    | 60                | 140    | /            |

### 3.0V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 0.5           | 1100             | 550     | 6.3               | 12.5   | 2.5          |
| 0.7           | 1100             | 550     | 8                 | 13     | 3.5          |
| 1             | 600              | 300     | 8                 | 13     | 3.5          |
| 1             | 1100             | 550     | 6.3               | 10     | 2.5          |
| 1.5           | 600              | 300     | 10                | 13     | 5            |
| 1.5           | 700              | 350     | 6.3               | 14     | 2.5          |

## 3.0V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 2             | 360              | 180     | 8                 | 20     | 3.5          |
| 2             | 480              | 240     | 6.3               | 22     | 2.5          |
| 3.3           | 280              | 140     | 8                 | 20     | 3.5          |
| 3.3           | 280              | 140     | 10                | 20     | 5            |
| 4             | 200              | 100     | 10                | 20     | 5            |
| 4             | 200              | 100     | 8                 | 20     | 3.5          |
| 4.7           | 180              | 90      | 10                | 20     | 5            |
| 4.7           | 180              | 90      | 12.5              | 21     | 5            |
| 5             | 180              | 90      | 8                 | 24     | 3.5          |
| 5             | 180              | 90      | 10                | 20     | 5            |
| 5             | 180              | 90      | 8                 | 20     | 3.5          |
| 6             | 150              | 75      | 10                | 20     | 5            |
| 7             | 140              | 70      | 10                | 20     | 5            |
| 8             | 120              | 60      | 12.5              | 21     | 5            |
| 10            | 120              | 60      | 10                | 25     | 5            |
| 10            | 110              | 55      | 10                | 30     | 5            |
| 10            | 110              | 55      | 12.5              | 21     | 5            |
| 15            | 76               | 38      | 12.5              | 25     | 5            |
| 15            | 76               | 38      | 12.5              | 34     | 5            |
| 16            | 76               | 38      | 16                | 20     | 7.5          |
| 18            | 60               | 30      | 16                | 24     | 7.5          |
| 20            | 60               | 30      | 12.5              | 34     | 5            |
| 25            | 60               | 30      | 16                | 26     | 7.5          |

## 3.0V Standard Ratings

| Capacity<br>F | ESR ( $\Omega$ ) |         | Product Size (mm) |        |              |
|---------------|------------------|---------|-------------------|--------|--------------|
|               | DC               | AC 1KHz | Diameter          | Height | Pin Distance |
| 25            | 60               | 30      | 12.5              | 34     | 5            |
| 30            | 40               | 20      | 16                | 26     | 7.5          |
| 40            | 40               | 20      | 18                | 41     | 7.5          |
| 50            | 40               | 20      | 18                | 41     | 7.5          |
| 60            | 40               | 20      | 18                | 41     | 7.5          |
| 100           | 30               | 15      | 22                | 42     | 10           |
| 100           | 16               | 8       | 22                | 46     | 10           |
| 360           | 6.4              | 3.2     | 35                | 61     | 10           |
| 400           | 6.4              | 3.2     | 35                | 61     | 10           |
| 500           | 6                | 3       | 35                | 80     | 22           |