



Green Tech Super Capacitor

360F 400F 600F

SP series

Features

- High power performance
- Low ESR
- Over 1,000,000 duty cycles
- Screw-in terminal

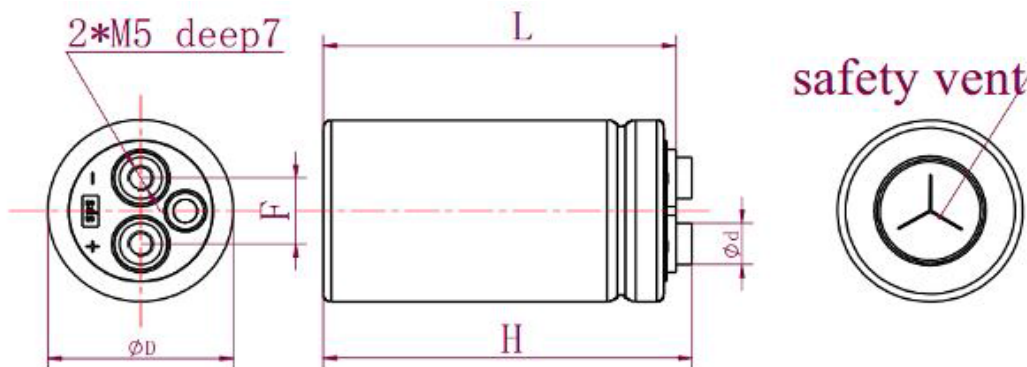


Applications

- Pitching control system of Wind Turbine Generator
- EV/HEV
- Solar energy conversion system
- Hybrid drive trains
- Mass transportation braking energy recovery system
- UPS/DVC
- Heavy duty machinery
- Locomotive engine startup system



Dimension



| Dimension(mm) | | | | | |
|---------------|------|-----|----|------|---|
| Capacitance | D | H | L | F | d |
| 360F | 35.2 | 67 | 64 | 12.7 | 8 |
| 400F | 35.2 | 67 | 64 | 12.7 | 8 |
| 600F | 35.2 | 101 | 98 | 12.7 | 8 |

Specifications

| Capacitance (F) | GT Part Number | Maximum ESR (mΩ) | | Max. Continuous Current (A) | Max. Peak Current (A) | Leakage Current (mA) @ 25°C after 72 Hours | Max. Energy Stored (Wh) | Max. Energy Density (Wh/Kg) | Weight (g) |
|-----------------|----------------|------------------|-----|-----------------------------|-----------------------|--|-------------------------|-----------------------------|------------|
| | | AC @ 1kHz | DC | | | | | | |
| 360 | GTSP-2R7-367US | 2.8 | 3.1 | 34 | 230 | 0.5 | 0.36 | 4.7 | 77 |
| 400 | GTSP-2R7-407US | 2.5 | 3.0 | 36 | 245 | 0.8 | 0.41 | 5.3 | 78 |
| 600 | GTSP-2R7-607US | 2.5 | 3.0 | 38 | 289 | 0.9 | 0.61 | 5.2 | 117 |

| | |
|--|---|
| Working Voltage | 2.7 VDC |
| Surge Voltage | 2.85 VDC |
| Capacitance Tolerance | -10% to +20% (25°C) |
| Operating Temperature Range | -40°C to 65°C, $\Delta C < 20\%$, $\Delta ESR < 50\%$ of initial measured value @ 25°C |
| Storage Temperature Range | -40°C to 70°C |
| Life (1500hrs @ 85°C @ 2.65V DC) | $\Delta C < 30\%$ of initial measured value, $\Delta ESR < 100\%$ of specified value |
| storage(2 years @ 70°C, without loading) | $\Delta C < 30\%$ of initial measured value, $\Delta ESR < 100\%$ of specified value |



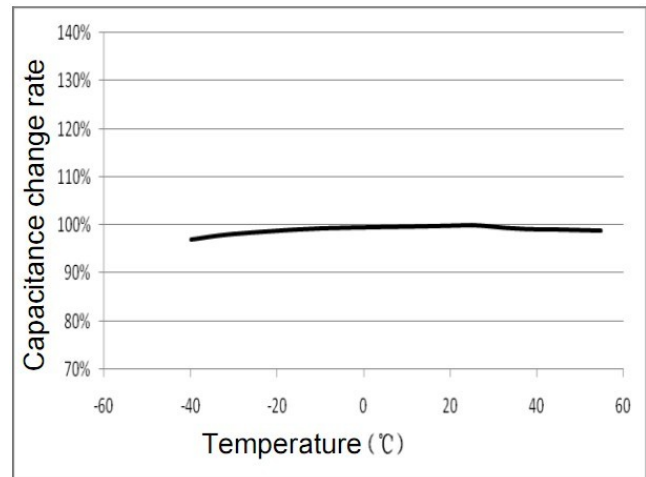
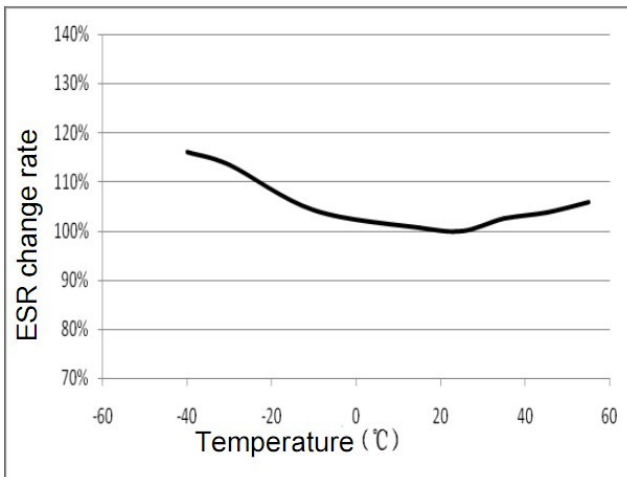
Install method



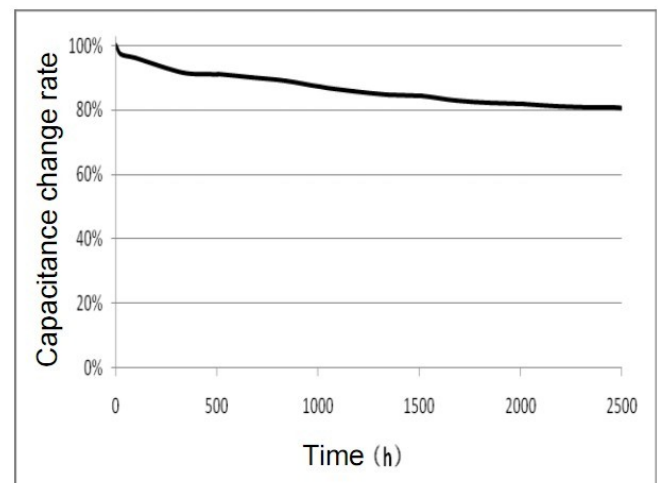
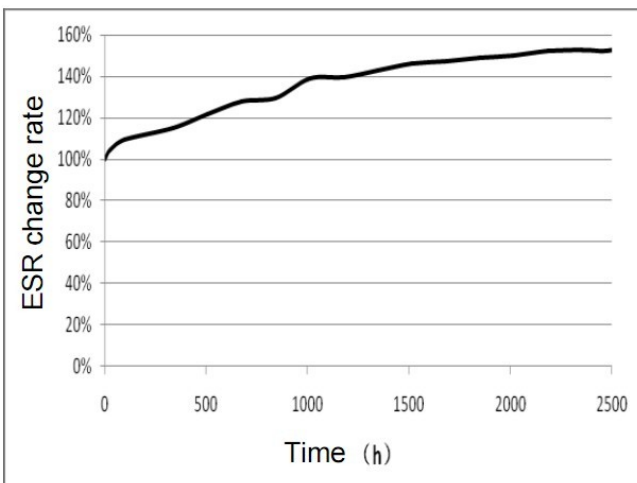
Use M5 screws install the capacitors on the PCB.
It's easy to install and dismantle and change new capacitors.
This terminal type suit for trial and test samples.
You can choose our soldering pillar type when request large amount to soldering on the PCB.

Curve of performance testing

Temperature character:

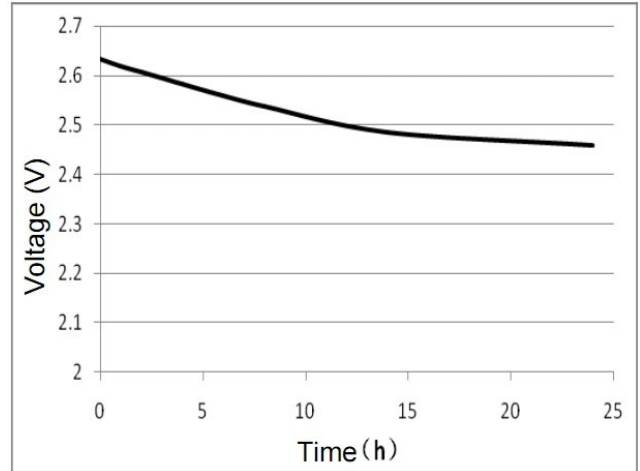
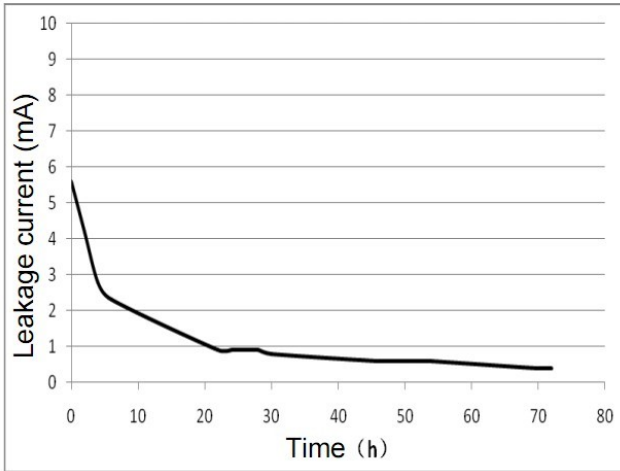


Life character:

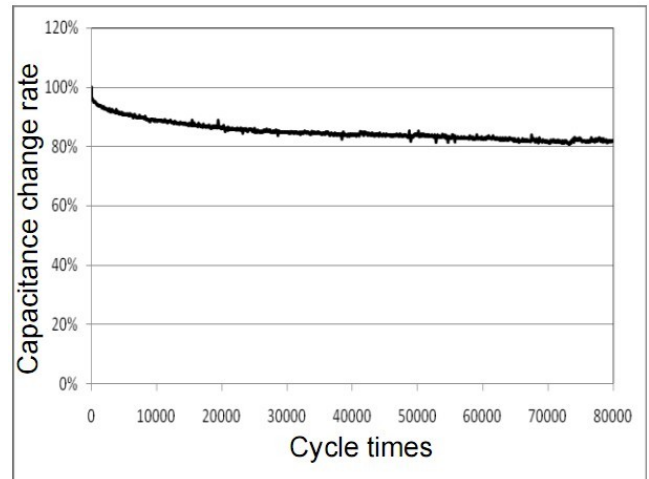
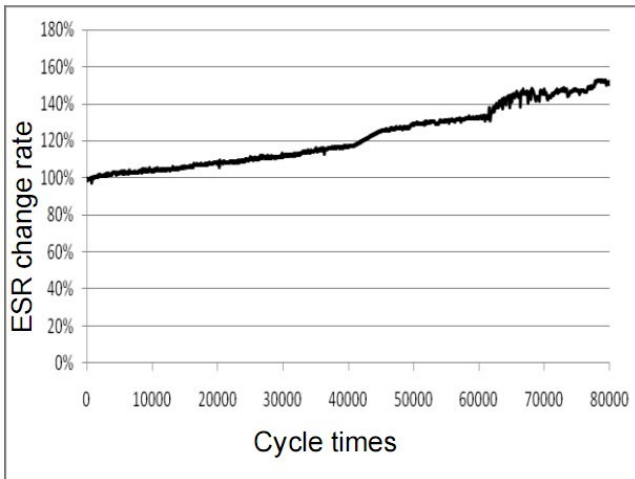




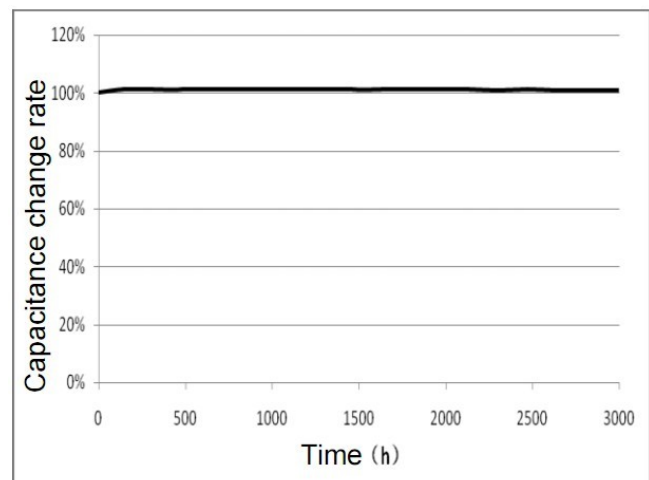
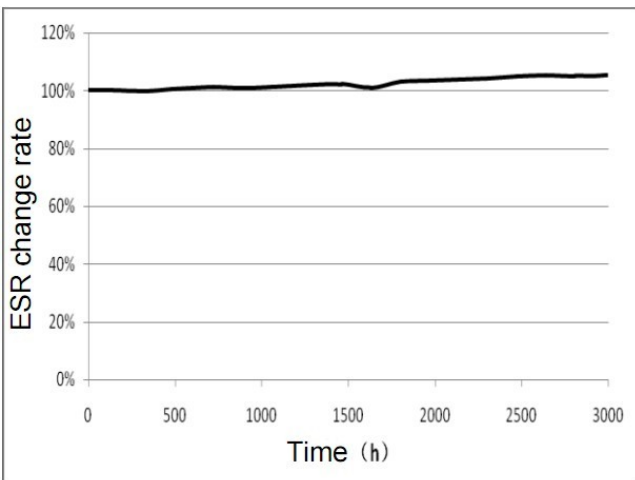
Leakage current,charge&discharge character



Charge&discharge cycle character



Store life character





GT Part NO.

| <u>GT</u> | <u>S</u> | <u>□</u> | <u>□ □ □</u> | <u>□ □ □</u> | <u>□</u> | <u>□</u> | | | | | |
|-----------|-----------|----------|--------------|---------------|----------|-------------|-----------|-----------|-----------|---------------|------------|
| Brand | Super | Series | | Rated Voltage | | Capacitance | | Tolerance | | Terminal Type | |
| Green | capacitor | Code | Series | Code | Voltage | Code | Value (F) | Code | Tolerance | Code | Terminal |
| Tech | | P | Power | 2R5 | 2.5V | 104 | 0.1 | J | ±5% | H | Horizontal |
| | | E | Energy | 2R7 | 2.7V | 224 | 0.22 | K | ±10% | V | Vertical |
| | | M | Module | 3R3 | 3.3V | 334 | 0.33 | M | ±20% | C | Coin |
| | | PH | Hi-Temp P | 5R0 | 5.0V | 474 | 0.47 | U | -10%~20% | R | Radial |
| | | EH | Hi-Temp E | 5R5 | 5.5V | 105 | 1.0 | V | 10%~30% | T | Thread |
| | | MH | Hi-temp M | 6R3 | 6.3V | 155 | 1.5 | Z | -20%~80% | N | Snap in |
| | | PP | Big Power | 012 | 12V | 205 | 2.0 | | | W | Weldable |
| | | ML | Military | 016 | 16V | 335 | 3.3 | | | P | Pillar |
| | | | | 024 | 24V | 475 | 4.7 | | | S | Screw in |
| | | | | 036 | 36V | 805 | 8.0 | | | L | Wire |
| | | | | 048 | 48V | 106 | 10 | | | | |
| | | | | 056 | 56V | 206 | 20 | | | | |
| | | | | 075 | 75V | 306 | 30 | | | | |
| | | | | 100 | 100V | 506 | 50 | | | | |
| | | | | 120 | 120V | 107 | 100 | | | | |
| | | | | 240 | 240V | 158 | 1500 | | | | |
| | | | | | | 308 | 3000 | | | | |
| | | | | | | 508 | 5000 | | | | |
| | | | | | | 728 | 7200 | | | | |