DPC series Low ESL DC-Link Applications



FEATURES

- Dry type structure
- High ripple current handling
- For low inductance applications
- Self-healing property
- Available with male and female terminals

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Plastic case with resin sealing

APPLICATIONS

- Wind power/ Solar power
- Electric vehicle/ Frequency converter
- UPS/ power supply,
- EV/ GTO snubbering

DPC SERIES DC-LINK CAPACITORS

DPC series is specifically designed for use in high power DC filtering and high pulse strength applications. The low inductance internal construction utilizes low loss metallized polypropylene for high ripple current capability. Male or female terminal options are offered flexibly. The capacitors are made of UL94 V-0 rated flame retardant plastic case and resin filling. High current ratings and robust mounting flanges make it suited for DC fast EV charging, GTO thyristors, power inverters, wind power inverters and motor drives.

ELECTRICAL CHARACTERISTICS

| Capacitance Range: | 10∼600µF |
|----------------------------------|---|
| Operating Temperature: | -40℃~+85℃ standard (105℃ optional) |
| Capacitance Tolerance: | ±5%(J); ±10% (K) |
| Rated Voltage (U _n): | 400~5000V _{dc} |
| Test Voltage between Terminals: | 1.5U _n 60s |
| Insulation Resistance: | R*C≥5000S @100Vdc, 60S |
| Max. Altitude: | <4000m |
| Flame Resistance: | UL 94V-0 |
| Lifetime Expectancy: | ≥100,000Hours @U _n , θ _{h.s.} ≤70 ℃ |
| Max Torque of terminals: | 6.0Nm |
| Failure Rate: | 50FIT |



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Top view Terminal type A: Female Terminal type B: Male Image: state of the st

COMMON DESIGN

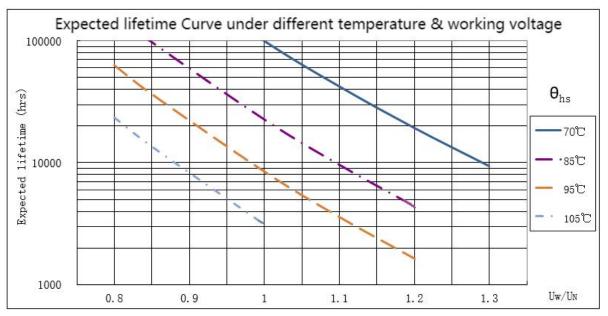
| Rated Voltage (U _{ndc)} | Rated cap.(µF) | Dimensions(mm) | | Inductance | Weight |
|-------------------------------------|----------------|----------------|----|------------|--------|
| | Cn | ΦD | н | (nH) | (kg) |
| 600 | 200 | 85 | 51 | 30 | 0.36 |
| | 280 | 85 | 64 | 35 | 0.45 |
| | 400 | 85 | 76 | 40 | 0.53 |
| 800 | 150 | 85 | 51 | 30 | 0.36 |
| | 220 | 85 | 65 | 35 | 0.45 |
| | 300 | 85 | 76 | 40 | 0.53 |
| 900 | 12 | 85 | 51 | 25 | 0.36 |
| | 20 | 85 | 51 | 28 | 0.36 |
| | 30 | 85 | 51 | 28 | 0.36 |
| | 120 | 85 | 51 | 30 | 0.36 |
| | 240 | 85 | 76 | 40 | 0.53 |
| 1100 | 75 | 85 | 51 | 30 | 0.36 |
| | 100 | 85 | 64 | 35 | 0.45 |
| | 150 | 85 | 76 | 40 | 0.53 |
| 1800 | 30 | 85 | 51 | 30 | 0.36 |
| | 40 | 85 | 64 | 35 | 0.45 |
| | 60 | 85 | 76 | 40 | 0.53 |
| 2200 | 24.5 | 85 | 64 | 0.45 | 0.45 |
| | 35 | 85 | 76 | 0.53 | 0.53 |

* CABO reserves the right to make changes without further notice to any products herein to improve reliability, function or design.

* Max. permissible voltages within one day: (1.1U_n, 30% of on-load duration) (1.15U_n, 30min) (1.2U_n, 5min) (1.3U_n, 1min) (1.5U_n, 100ms).

* Other values and dimensions are available on request.

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For capacitors application, various factors will affect the expected life of capacitors such as voltage, temperature, current, network harmonics, lighting or radiation and other unknown factors. The above lifetime curve only considers the effects of voltage and temperature. Based on the qualified results of long-term durability test, the lifetime curve of the capacitor under different working conditions is calculated by using the theoretical calculation formula of lifetime. Therefore, the lifetime curve is only used as a reference for selection, and does not represent the actual service life of the capacitor, nor does it represent the quality assurance requirements.

■RELATED CAPACITOR SERIES



CABO is a leading brand of high reliability capacitors, providing specifically designed solutions to meet the reliability needs of industrial, military, medical and specialized applications worldwide.

As a well-known brand of China, CABO capacitors are among the world's most reliable component. Focus on High-End global markets and High reliability request fields, providing customization services. With world-class design, testing and manufacturing facilities in China, enable the quick turn-around for fast and mass delivery worldwide.

Our extensive custom design and development capabilities coupled with standardized mass production capacity offerings allow us to be a competitive option for power electronics industry.

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