**DLB Series**

**Overview**

The DLB Series is a polypropylene metallized film

with solvent resistant plastic case filled with resin

sealing (UL 94 V-0)

**Application:**

The DLB series is designed for DC-link applications.

For compact design of: Frequency converters.

Industrial and high-end power supplies.

Solar inverters.

**Benefits**

High capacitance density, compact.

Excellent self-healing properties.

Overvoltage capability.

Low losses with high current capability.

High reliability.

Long useful life.

RoHS-compatible.

**Construction**

Dielectric: Polypropylene (PP) film.

Protection: Solvent resistant plastic case with resin sealing (UL 94 V-0)

Terminals: Parallel wire leads, lead-free tinned

2-pin and 4-pin versions

Standard lead lengths: 6 ±1 mm

Special lead lengths are available on request

**Structure of ordering code**

**DLB - 1100 - 30 - P2 0**

**1 2 3 4 5**

**1** Series code

**2** Rated voltage: 1100 V

**3** Rated capacitance: 30 μF

**4** Designs Type

**5** Internal use

**DLB Series**

**Electrical data**

Reference standards IEC 61071 , IEC 60068 , RoHS compliance.

Rated capacitance (CN) 4.5μF ... 90μF

Rated voltage (UNDC) 800V ... 1300V

Standard capacitance tolerance K: ±10% , J: ±5%

Dissipation factor tan δ (100Hz@20°C) ≤ 10×10-4

Test voltage between terminals UTT 1.5 UNDC , 10s

Test voltage between terminals and case UTC 3000 VAC, 10s

Insulation Resistance Ri x C ≥ 10,000s at 100 VDC/1min at +25°C

Operating temperature range (case) –40 °C ... +105°C

Max. permissible ambient temperature +85°C, operation at rated power, rated current

and natural cooling

Storage temperature Θstg –40 ... +105 °C

Climatic category 40/85/56

Damp heat test - Test conditions Temperature : +40 °C

Relative humidity : 93% ±2%

Test duration : 56 days

- Performances Capacitance change : ≤ ± 5%

tgδ change: ≤50% of nominal value at 1 kHz

Insulation resistance: ≤50% of limit value

Expected lifetime 100 000 h at UNDC @ Θhs 70°C

Fit rate 50 (100 000 h at Θhs 70°C)

Resistance to soldering heat

-Test conditions: Solder bath temperature= +260±5°C dipping

time (with heat screen) ≤4s

-Performance: Capacitance change: ≤ ±1%

tgδ change : ≤0,0010 at 1kHz

Visual inspection No visible damage

**DESIGNS**

2-pin version 4-pin version



Designs P2 Designs P4

**DLB Series**

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**UNDC 1100V @ Θhs 70°C 900V @ Θhs 85°C**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ordering code | Cn (μF) | DIMENSIONS (mm) | | | | | Imax  10kHz@60°  (A) | Imax  20kHz@60°  (A) | Rs  (mΩ) |
| L | B | H | P | P1 |
| DLB-1100-6.5-P20 | 6.5 | 42 | 17 | 28 | 37.5 | - | 7 | 7 | 13.4 |
| DLB-1100-11-P20 | 11 | 42 | 20 | 39 | 37.5 | - | 9 | 9 | 8.2 |
| DLB-1100-15-P20 | 15 | 42 | 28 | 37 | 37.5 | - | 12 | 11 | 6.1 |
| DLB-1100-15-P40 | 15 | 42 | 28 | 37 | 37.5 | 10.2 | 13 | 12 | 5.9 |
| DLB-1100-20-P20 | 20 | 42 | 30 | 45 | 37.5 | - | 14 | 13 | 4.7 |
| DLB-1100-20-P40 | 20 | 42 | 30 | 45 | 37.5 | 20.3 | 15 | 14 | 4.5 |
| DLB-1100-30-P20 | 30 | 57 | 30 | 45 | 52.5 | - | 14 | 13 | 6.0 |
| DLB-1100-30-P40 | 30 | 57 | 30 | 45 | 52.5 | 20.3 | 15 | 14 | 5.8 |
| DLB-1100-42-P20 | 42 | 57 | 35 | 50 | 52.5 | - | 14 | 14 | 4.4 |
| DLB-1100-42-P40 | 42 | 57 | 35 | 50 | 52.5 | 20.3 | 18 | 17 | 4.2 |
| DLB-1100-55-P20 | 55 | 57 | 42 | 56 | 52.5 | - | 14 | 14 | 3.5 |
| DLB-1100-55-P40 | 55 | 57 | 42 | 56 | 52.5 | 20.3 | 20 | 19 | 3.3 |