



## DC Link Small Plastic Case

A DC Link Small Plastic Case Capacitor is a key component in power electronics used to stabilize and filter DC voltage in the intermediate link between rectifiers and inverters. Encased in a compact plastic case, these capacitors are designed for easy integration into various electrical systems while providing robust protection against environmental factors. They offer high capacitance values and low equivalent series resistance (ESR), which are essential for minimizing voltage ripple and enhancing the efficiency of power conversion processes.

These capacitors are capable of handling high ripple currents, making them suitable for applications requiring stable performance under high voltage conditions, such as renewable energy systems, electric vehicles, industrial drives, and uninterruptible power supplies (UPS). The small plastic case design allows for efficient thermal management and helps in maintaining consistent performance across a wide range of temperatures.

DC Link Small Plastic Case Capacitors often incorporate self-healing properties, which improve their longevity and safety by preventing catastrophic failures under electrical stress. Their compact size and modular design facilitate easy installation in space-constrained environments, making them versatile for various applications. Available in a variety of capacitance and voltage ratings, these capacitors provide flexibility to meet specific requirements. Overall, DC Link Small Plastic Case Capacitors are essential for ensuring the smooth operation and reliability of modern power electronic systems.

### Technical Data

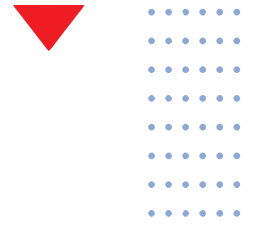
**Applications:** DC-DC converters, power inverters, and compact power modules.

**Voltage Range:** Up to 1000 V DC.

#### Safety:

- Self-Healing Capacitor Technology
- Internal fuse via segmentation





## Construction

- Dielectric: Metallised Polypropylene film
- Non-PCB, Impregnation – Biodegradable PU Resin
- Plastic case.

## Features

- Self-Healing Technology
- High partial discharge voltage
- High humidity resistance
- Low dissipation factor
- High insulation resistance
- Segmented Film design providing in-built fuses
- CE & RoHS Compliant
- NPCB, Biodegradable Polyurethane Resin

## Technical data and Specifications:

Capacitance Value	Upto 300 $\mu$ F * Higher ratings available on request
Tolerance	$\pm$ 5 %
Voltage Rating	Upto 1000 VDC
tan $\delta$ 0 (dielectric)	$2 \times 10^{-4}$
Voltage test between terminals	
V (Terminal to Terminal)	1.5 X $U_{RMS}$ AC, 2 sec
Voltage test between terminals and case	
V (Terminals and Case) (Uiso)	$2 * U_i + 1000$ V or 2000 V whichever is the highest value for 10 seconds
TMIN	-40 $^{\circ}$ C
TMAX	+70 $^{\circ}$ C
Storage temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Hot Spot temperature	+85 $^{\circ}$ C
Maximum Humidity	Max. 95% (non-condensing)
Life Expectancy	up to 100,000 hours * Greater life expectancy can be offered based on customer request
Impregnation	Biodegradable PU resin
Mounting position	Any
Terminals Type	TC Wire
Enclosure material	Plastic
Reference Standard	IEC 61071