

# Plastic mounting clip KU-PA247/2

The electrically insulating, fiberglass-reinforced plastic mounting clip **KU-PA247/2** has been designed to meet the specific requirements of power electronics, especially those of power semiconductors in TO247 casings. Due to its application-specific design and the contact pressure it applies to the semiconductor, this clip ensures optimum thermal linkage to the heat sink. In addition, this mounting element is flexible, upgradeable and suitable for a wide range of appliances.

#### **GENERAL PROPERTIES**

| Material          |                   | crystalline polymer |
|-------------------|-------------------|---------------------|
| Colour            |                   | black               |
| Filler            |                   | fiberglass          |
| Filler percentage | %                 | 30                  |
| Density           | g/cm <sup>3</sup> | 1.38                |
| Weight            | g                 | 6.8                 |

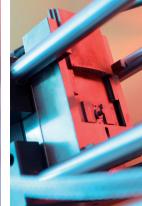
#### MECHANICAL PROPERTIES

| Tensile strength         | N/mm² | 125  |
|--------------------------|-------|------|
| Impact strength at +23°C | kJ/m² | 33   |
| Bending strength         | MPa   | 195  |
| Tensile modulus          | MPa   | 10.7 |

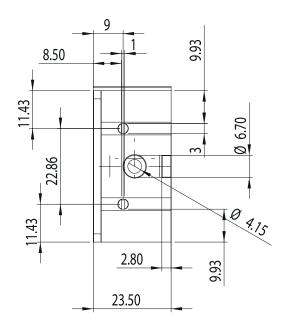
#### ELECTRICAL PROPERTIES

| Dielectric strength         | kV/mm | 31                     |
|-----------------------------|-------|------------------------|
| Specific volume resistivity | Ωm    | 1.0 x 10 <sup>16</sup> |





#### **MEASUREMENTS**



## **OTHER PROPERTIES**

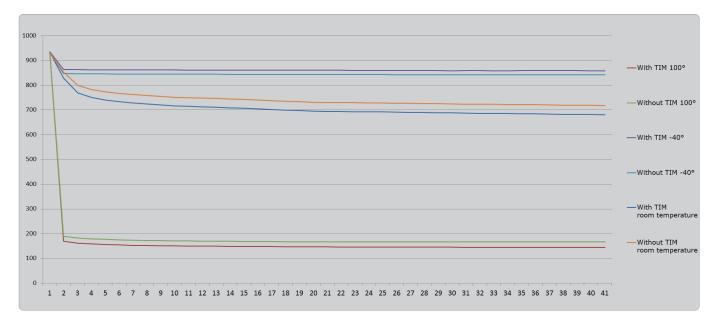
- High tracking resistance (CTI 1)
- · Dielectric constant 3.2
- Excellent chemical resistance
- · Very low water absorption
- Non-flammable according to UL94-V0

## AREAS OF APPLICATION

- Power supply unity
- UPS
- Charging devices
- Frequency converters
- Power tools
- White goods



## LONG-TERM TEST CHART



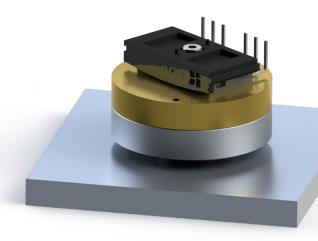
## LONG-TERM TESTING RESULTS

The KU-PA247/2 plastic mounting clips were subjected to two parallel long-term tests under laboratory conditions, at three temperature ranges (room temperature 22°C, high temperature +100°C, and low temperature -30°C), over a period of 41 days.

At all three temperature ranges, the test revealed a steady reduction of contact force until about day 40, after which contact force is stable.

The differences between the two curves within the same temperature range are owed to the compressibility of the Thermal Interface Material.

## **TEST CONFIGURATION**





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