

Order code:

Applications:

DC capacitor for general use in power electronics
 also for nonsinusoidal voltages and currents

Standard:

acc. to IEC 61071

Characteristics

| | | |
|-----------------------------|---------------------------|---------------------|
| Rated capacitance | C_N | 50 μF ±10% |
| Rated d.c. voltage | U_{N DC} | 5000 V d.c. |
| Max. ripple voltage | U_r | 800 V |
| Non-recurrent surge voltage | u_s | 7500 V |
| Rated energy | W_N | 625 Ws |
| Maximum current | I_{max} | 80 A |
| Maximum peak current | î | 4 kA |
| Maximum surge current | I_s | 12 kA |
| Series resistance | R_s | 1.5 mΩ |
| Tangent of the loss angle | tanδ_o | 2 x10 ⁻⁴ |
| Self discharge time const. | C x R_{is} | 5000 s |
| Self inductance | L_e | 240 nH |

Thermal conditions

| | | |
|-------------------------------|----------------------------|-------------|
| Lowest operating temperature | Θ_{min} | -40 °C |
| Maximum operating temperature | Θ_{max} | 70 °C |
| Thermal resistance | R_{th} | 1.2 K/W |
| Storage temperature | Θ_{storage} | -40..+85 °C |

Failure rate

| | | |
|-------------------------|--|----------|
| reference service life | | 50 FIT* |
| at Θ _{hotspot} | | 100000 h |
| | | <70 °C |

* See FIT-RATE diagram on pg.4

Test data

| | | |
|--------------------------------------|-----------------------|----------------|
| Voltage test between terminals | U_{BB} | 7500 V /10s |
| A.C. voltage test terminal/container | U_{BG} | 12000 V AC/10s |

Dimensions

| | | |
|-------------------------|------------------------------------|----------------|
| Rated diameter | D₁ | 116 (±1) mm |
| Maximum diameter | D₂ | 120 (±0,5) mm |
| Length of the case | L₁ | 320 (±2) mm |
| Length of the terminals | L₂ | 55 (+5) mm |
| distance termials | a | 38 (±1) mm |
| Terminal | | M10 x 20 mm |
| base mounting stud | G_BxL_B | M12x16 (+1) mm |
| Clearance in air | L | 17 mm |
| Creepage distance | K | 54 mm |

Approx weight

4.1 kg

Mechanical characteristics

| | |
|--------------|---|
| Construction | metallized polypropylene capacitor, selfhealing |
| Protection | overpressure disconnecter |
| Terminals | Screw terminals on ceramic insulators |
| Impregnant | liquid impregnants. non PCB |
| Fire load | 164 MJ |

outline drawing

