

Aluminum Electrolytic capacitors

MNH series

Description

Low impedance
 Low ESR
 Wide frequency range
 Wide operating temperature range

Applications

Power supplies
 Consumer electronics
 Industrial electronics

Electrical characteristics

Operating Temperature: $-25^{\circ}\text{C} \div 85^{\circ}\text{C}$
 Rated Voltage: $400\text{Vdc} \div 450\text{Vdc}$
 Rated Capacitance: $100\mu\text{F} \div 330 \mu\text{F}$
 Capacitance Tolerance (pri 100Hz, 20°C): $-20\%+20\%$
 Dissipation factor (pri 100Hz, 20°C): $0,15 \div 0,18$
 Leakage current (after 5 minutes application of rated voltage): $I = 0,005.C.U$
 I - current [μA]
 C - rated capacitance [μF]
 U - rated voltage [V]

The aluminum case capacitors are supplied with PVC sleeve insulation and a safety vent located on end-deck.

Load life:

Load life is 2000 Hrs (at maximum operating temperature, at rated voltage and AC current load as per Table 1).

After 2000 Hrs of the above application of rated voltage and current load, capacitors must meet the following characteristics requirements:

Capacitance change $\leq \pm 15\%$ of initial value. $\text{Tan } \delta \leq 150\%$ of initial value
 Leakage current \leq initial value

AC Load:

The maximum AC load at maximum operating temperature (85°C) is given in Table 1. The AC load can be increased at lower operating temperatures by coefficient as per Table 2, with capacitor life expectancy unaffected.

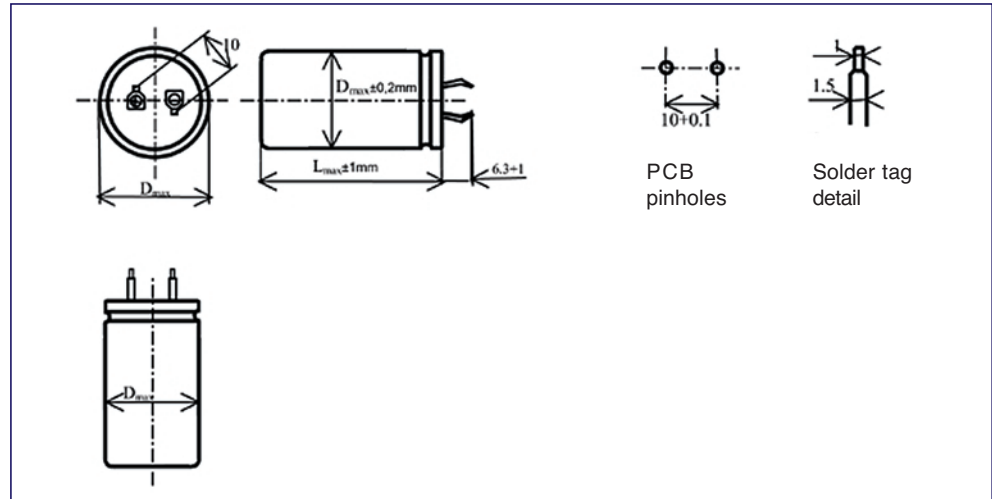
Table 2

| Type Number | Rated Capacitance C_N [μF] | Rated Voltage U_N [V] | Dimensions [D x L v mm] | max. $\text{tan } \delta$ at 100Hz, 20°C | Iac [mA] | Drawing Number |
|-------------|---|-------------------------|-------------------------|--|----------|----------------|
| MNH 040 | 100 | 400 | 22x42 | 0,15 | 600 | 1 |
| MNH 040 | 150 | 400 | 25x42 | 0,15 | 800 | 1 |
| MNH 040 | 220 | 400 | 30x50 | 0,15 | 1000 | 1 |
| MNH 040 | 330 | 400 | 30x50 | 0,18 | 1400 | 1 |
| MNH 040 | 470 | 400 | 35x50 | 0,18 | 1800 | 1 |
| MNH 045 | 180 | 450 | 25x42 | 0,15 | 900 | 1 |
| MNH 045 | 390 | 450 | 35x50 | 0,18 | 1500 | 1 |
| MNH 045 | 940 | 450 | 40x68 | 0,18 | 3500 | 2 |

Table 1

| | | | | | | | |
|--|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Coefficient for permissible Iac increase | 2,3 | 2,0 | 1,7 | 1,53 | 1,3 | 1,15 | 1,0 |
| Operating temperature | $\leq 40^{\circ}\text{C}$ | 45°C | 50°C | 55°C | 60°C | 70°C | 85°C |

Drawing 1:



Drawing 2:

