

PHE846

- Insulated leads
- EMI suppressor, class X2, metallized polypropylene
- 47 - 680 nF, 275 VAC, +105°C

TYPICAL APPLICATIONS

For worldwide use as electromagnetic interference suppressor in all X2 and across-the-line applications.

CONSTRUCTION

Metallized polypropylene film encapsulated with selfextinguishing epoxy resin in a box of material recognized to UL 94 V-0.

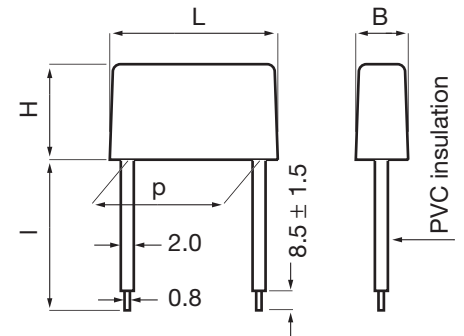
TECHNICAL DATA

| Rated voltage | 275 VAC 50/60 Hz | | | | | | | | | | | | |
|------------------------------|--|---------------------|------------|---------------------|-------|------|------|--------|------|------|---------|------|---|
| Capacitance range | 47 – 680 nF | | | | | | | | | | | | |
| Capacitance tolerance | ± 20% standard, ± 10% option, ± 5% on request | | | | | | | | | | | | |
| Temperature range | –55 to +105°C | | | | | | | | | | | | |
| Climatic category | 55/105/56/B | | | | | | | | | | | | |
| Approvals | ENEC | | | | | | | | | | | | |
| Dissipation factor | Maximum values at +23°C | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th></th> <th>C ≤ 0.1 μF</th> <th>0.1 μF < C ≤ 1.0 μF</th> </tr> </thead> <tbody> <tr> <td>1 kHz</td> <td>0.1%</td> <td>0.1%</td> </tr> <tr> <td>10 kHz</td> <td>0.2%</td> <td>0.4%</td> </tr> <tr> <td>100 kHz</td> <td>0.6%</td> <td>–</td> </tr> </tbody> </table> | | C ≤ 0.1 μF | 0.1 μF < C ≤ 1.0 μF | 1 kHz | 0.1% | 0.1% | 10 kHz | 0.2% | 0.4% | 100 kHz | 0.6% | – |
| | C ≤ 0.1 μF | 0.1 μF < C ≤ 1.0 μF | | | | | | | | | | | |
| 1 kHz | 0.1% | 0.1% | | | | | | | | | | | |
| 10 kHz | 0.2% | 0.4% | | | | | | | | | | | |
| 100 kHz | 0.6% | – | | | | | | | | | | | |

Test voltage between terminals The 100% screening factory test is carried out at 2200 VDC. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test.

Insulation resistance C ≤ 0.33 μF: ≥ 30 000 MΩ
C > 0.33 μF: ≥ 10 000 s

In DC applications Maximum voltage 760 VDC



| p | d | std l | max l |
|------|-----|-------|-------|
| 15.0 | 0.8 | 30 | 40 |
| 22.5 | 0.8 | 30 | 40 |

Tolerance in lead length ± 2 mm

ENVIRONMENTAL TEST DATA

| | | | |
|------------------------------|-------------------------------|---|-------------------|
| Endurance | IEC 60384–14 | 1.25 x U _R VAC 50 Hz, once every hour increased to 1000 VAC for 0.1 s, 1000 h at upper rated temperature | |
| Change of temperature | IEC 60068–2–14 Test Na | Upper and lower rated temperature 5 cycles | No visible damage |
| Active flammability | EN 132400 | | |
| Passive flammability | IEC 60384-14 (1993) EN 132400 | Enclosure material of UL94V-0 flammability class | |
| Humidity | IEC 60068-2-3 Test Ca | +40°C and 90 – 95% R.H. | 56 days |

ARTICLE TABLE

| Capacitance μF | Box code | Max dimensions in mm | | | f_o MHz | Max dU/dt V/ μs | Article code |
|------------------------------|----------|----------------------|---|---|--------------|------------------------------------|--------------|
| | | B | H | L | | | |

LEAD SPACING 15 MM

| | | | | | | | |
|-------|-----|-----|------|------|-----|-----|---------------------|
| 0.047 | B01 | 5.5 | 10.5 | 18.0 | 3.3 | 100 | PHE846MB5470MB01R30 |
| 0.068 | B01 | 5.5 | 10.5 | 18.0 | 2.7 | 100 | PHE846MB5680MB01R30 |
| 0.10 | B02 | 5.5 | 14.0 | 18.0 | 2.2 | 100 | PHE846MB6100MB02R30 |
| 0.15 | B03 | 6.5 | 12.5 | 18.0 | 1.8 | 100 | PHE846MB6150MB03R30 |
| 0.22 | B07 | 8.5 | 14.5 | 18.0 | 1.5 | 100 | PHE846MB6220MB07R30 |

LEAD SPACING 22.5 MM

| | | | | | | | |
|------|-----|------|------|------|------|-----|---------------------|
| 0.33 | D01 | 7.5 | 15.5 | 26.5 | 1.0 | 100 | PHE846MD6330MD01R30 |
| 0.47 | D02 | 8.5 | 16.5 | 26.5 | 0.85 | 100 | PHE846MD6470MD02R30 |
| 0.68 | D03 | 10.5 | 18.5 | 26.5 | 0.71 | 100 | PHE846MD6680MD03R30 |

APPROVALS/REFERENCE DOCUMENTS

| Certification Body | Specification | Approval reference |
|--------------------|---------------|--------------------|
| ENEC | EN 132400 | SE/0140-6 |

ORDERING INFORMATION

The article code for the standard part is given in the article table. For other options, see page 12.

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Capacitance tolerance code
- Rated voltage
- X2
- Approval marks
- Manufacturing date code
- IEC climatic category
- Passive flammability class