

# 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.

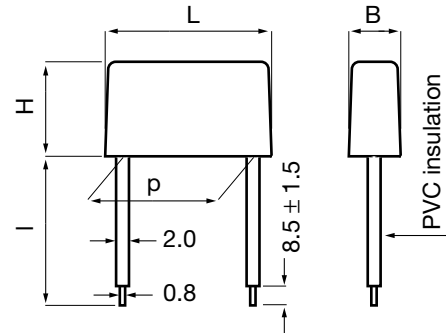
## TECHNICAL DATA

<b>Rated voltage</b>	275 VAC 50/60 Hz												
<b>Capacitance range</b>	47 – 680 nF												
<b>Capacitance tolerance</b>	± 20% standard, ± 10% option, ± 5% on request												
<b>Temperature range</b>	-55 to +105°C												
<b>Climatic category</b>	55/105/56/B												
<b>Approvals</b>	ENEC												
<b>Dissipation factor</b>	Maximum values at +23°C												
	<table border="1"> <thead> <tr> <th></th> <th>C ≤ 0.1 μF</th> <th>0.1 μF &lt; 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%	-
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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 630 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

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

## ARTICLE TABLE

Capacitance $\mu\text{F}$	Max dimensions in mm				Quantity per package			Max $dU/dt$ $\text{V}/\mu\text{s}$	Approvals ENEC	Article code
	B	H	L	$\rho$	Bulk pcs	Weight g	$f_0$ MHz			
<b>LEAD SPACING 15 MM</b>										
0.047	5.5	10.5	18.5	15.0	400	1.7	3.3	100	√	PHE846MB5470MB01R30
0.068	5.5	10.5	18.5	15.0	400	1.7	2.7	100	√	PHE846MB5680MB01R30
0.10	5.5	14.0	18.5	15.0	300	2.0	2.2	100	√	PHE846MB6100MB02R30
0.15	6.5	12.5	18.5	15.0	300	2.2	1.8	100	√	PHE846MB6150MB03R30
0.22	8.5	14.5	18.5	15.0	200	3.1	1.5	100	√	PHE846MB6220MB07R30
<b>LEAD SPACING 22.5 MM</b>										
0.33	7.5	15.5	27.0	22.5	200	4.1	1.0	100	√	PHE846MD6330MD01R30
0.47	8.5	16.5	27.0	22.5	150	4.6	0.85	100	√	PHE846MD6470MD02R30
0.68	10.5	18.5	27.0	22.5	150	6.2	0.71	100	√	PHE846MD6680MD03R30

## APPROVALS/REFERENCE DOCUMENTS

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

## MARKING

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

## ORDERING INFORMATION

The article code for the standard part is given in the article table.  
For other options, see page 21.

## PACKING

The box dimensions for bulk packaging are 245 x 145 x 80 mm. Quantity/package as per article table.