

PHE850

RoHS
Compliant

- EMI suppressor, class Y2, metallized polypropylene
- 0.001 – 1.0 μF , 300 VAC/480 VAC, +110 °C
- New, small dimensions including low profile capacitors

TYPICAL APPLICATIONS

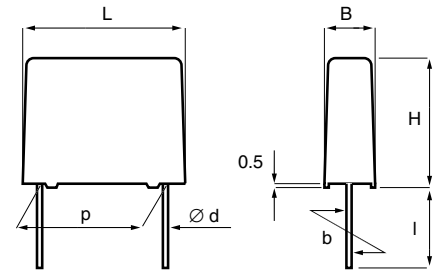
The capacitors are intended for use as interference suppressors in Y2 (line-to-earth) applications.

Not for use in series with the mains.

See www.kemet.com for more information.

CONSTRUCTION

Winding of metallized polypropylene. Encapsulated in self-extinguishing material meeting the requirements of UL 94V-0.



TECHNICAL DATA

Rated voltage	300 VAC, 50/60 Hz (ENEC) 480 VAC 50/60 Hz (UL, CSA)												
Capacitance range μF	0.001–1.0												
Temperature range °C	–55/+110												
Climatic category IEC	55/110/56/B												
Capacitance tolerance	$\pm 20\%$ standard, other tolerances on request												
Approvals	ENEC, UL, cUL												
Dissipation factor $\tan\delta$	Maximum values at +23 °C <table border="1"> <thead> <tr> <th></th> <th>$C \leq 0.1 \mu\text{F}$</th> <th>$0.1 \mu\text{F} < C \leq 1 \mu\text{F}$</th> </tr> </thead> <tbody> <tr> <td>1 kHz</td> <td>0.2%</td> <td>0.15%</td> </tr> <tr> <td>10 kHz</td> <td>0.3%</td> <td>0.4%</td> </tr> <tr> <td>100 kHz</td> <td>0.6%</td> <td>–</td> </tr> </tbody> </table>		$C \leq 0.1 \mu\text{F}$	$0.1 \mu\text{F} < C \leq 1 \mu\text{F}$	1 kHz	0.2%	0.15%	10 kHz	0.3%	0.4%	100 kHz	0.6%	–
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Insulation resistance	$C \leq 0.33 \mu\text{F}$: $\geq 30\,000 \text{ M}\Omega$ $C > 0.33 \mu\text{F}$: $\geq 10\,000 \text{ s}$												
Resonance frequency	Tabulated self-resonance frequencies f_0 refer to 5 mm lead lengths.												
Test voltage between terminals	The 100% screening factory test is carried out at 5000 VDC and 2500 VAC. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test.												
In DC applications	Recommended voltage: $\leq 1250 \text{ VDC}$												

p	d	std l	max l	b
10.0 ± 0.4	0.6	17	30	± 0.4
15.0 ± 0.4	0.6/0.8*	17	30	± 0.4
22.5 ± 0.4	0.8	6	30	± 0.4
27.5 ± 0.4	0.8	6	30	± 0.4
37.5 ± 0.5	1.0	6	30	± 0.7

* Size 7.5 x 14.5 x 18.0 and bigger, $d = 0.8 \text{ mm}$.

Tolerance in lead length
 $< 30 \text{ mm}$ $\begin{matrix} +0 \\ -1 \end{matrix} \text{ mm}$

30 mm $\begin{matrix} +5 \\ -0 \end{matrix} \text{ mm}$

ENVIRONMENTAL TEST DATA

Endurance	EN/IEC 60384-14:2005	1.7 x U_R VAC 50 Hz, once every hour increased to 1000 VAC for 0.1 s, 1000 h at upper rated temperature	
Vibration	IEC 60068-2-6, Test Fc	3 directions at 2 hour each, 10 – 55 Hz at 0.75 mm or 98 m/s ²	No visible damage, No open or short circuit
Bump	IEC 60068-2-29, Test Eb	1000 bumps at 390 m/s ²	No visible damage, No open or short circuit
Change of temperature	IEC 60068–2–14 Test Na	Upper and lower rated temperature 5 cycles	No visible damage
Active flammability	EN/IEC 60384-14:2005		
Passive flammability	EN/IEC 60384-14:2005		
Humidity	IEC 60068-2-3, Test Ca	+40°C and 90 – 95% R.H.	56 days

