

PHE844

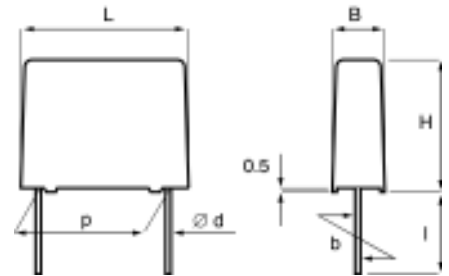
- EMI suppressor, class X1, metallized polypropylene
- 0.1 – 2.2 μF , 440 VAC/480VAC, +105°C
- New, small dimensions

TYPICAL APPLICATIONS

For worldwide use as electromagnetic interference suppressor in all X1 and across-the-line applications.

CONSTRUCTION

Metallized polypropylene winding, encapsulated in self-extinguishing material meeting the requirements of UL 94 V-0.



p	d	std l	max l	b
22.5 ± 0.4	0.8	6	30	±0.4
27.5 ± 0.4	0.8	6	30	±0.4
37.5 ± 0.4	1.0	6	30	±0.4

Tolerance in lead length
 < 30 mm $\begin{matrix} +0 \\ -1 \end{matrix}$ mm
 ≥ 30 mm $\begin{matrix} +5 \\ -0 \end{matrix}$ mm

TECHNICAL DATA

Rated voltage	440 VAC/480 VAC 50/60 Hz		
Capacitance range	0.1 – 2.2 μF		
Capacitance tolerance	± 20% standard, ± 10% option		
Temperature range	–40 to +105°C		
Climatic category	40/105/56/B		
Approvals	ENEC, UL, CSA		
Dissipation factor	Maximum values at +23°C		
	C ≤ 0.1 μF	0.1 μF < C ≤ 0.47 μF	C > 0.47 μF
1 kHz	0.1%	0.1%	0.1%
10 kHz	0.1%	0.2%	0.5%
100 kHz	0.6%	0.9%	–

Test voltage between terminals
 The 100% screening factory test is carried out at 2700 VDC. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test.

Resonance frequency
 Tabulated self-resonance frequencies f_0 refer to 5 mm lead length.

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

In DC application
 Recommended voltage: ≤1000VDC

ENVIRONMENTAL TEST DATA

Endurance	IEC384–14	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	
Vibration	IEC68–2–6 Test Fc	3 directions at 2 hours each, 10–55 Hz at 0.75 mm or 98 m/s ²	No visible damage No open or short circuit
Bump	IEC68–2–29 Test Eb	1000 bumps at 390 m/s ²	No visible damage No open or short circuit
Change of temperature	IEC68–2–14 Test Na	Upper and lower rated temperature 5 cycles	No visible damage
Active flammability	EN 132400		
Passive flammability	IEC384-14 (1993) EN 132400 UL1414	Enclosure material of UL94V-0 flammability class	
Humidity	IEC 68-2-3 Test Ca	+40°C and 90 – 95% R.H.	56 days

ARTICLE TABLE

Capacitance µF	Max dimensions in mm				Quantity per package			Max dU/dt V/µs	Approvals			Article code 1 st block
	B	H	L	p	Tray pcs	Weight g	f ₀ MHz		ENEC	UL	CSA	
LEAD SPACING 22.5 MM												
0.1	8.0	16.0	26.0	22.5	186	3.8	3.2	100	√	√	√	PHE844RD6100M
0.15	9.0	18.5	26.0	22.5	168	5.0	2.6	100	√	√	√	PHE844RD6150M
0.22	11.0	21.5	26.0	22.5	253	6.6	2.1	100	√	√	√	PHE844RD6220M
0.33	13.5	23.0	26.0	22.5	209	9.0	1.8	100	√	√	√	PHE844RD6330M
0.47	15.5	24.5	26.0	22.5	176	10.0	1.5	100	√	√	√	PHE844RD6470M
LEAD SPACING 27.5 MM												
0.22	10.5	20.5	31.5	27.5	216	8.0	2.2	100	√	√	√	PHE844RF6220M
0.33	13.5	23.0	31.5	27.5	171	10.8	1.7	100	√	√	√	PHE844RF6330M
0.47	14.5	24.5	31.5	27.5	153	14.5	1.4	100	√	√	√	PHE844RF6470M
0.68	17.5	28.0	31.5	27.5	126	17.0	1.1	100	√	√	√	PHE844RF6680M
1.0	21.0	30.0	31.5	27.5	108	22.6	1.0	100	√	√	√	PHE844RF7100M
LEAD SPACING 37.5 MM												
0.47	13.0	24.0	41.0	37.5	140	14.0	1.3	100	√	√	√	PHE844RR6470M
0.68	13.0	24.0	41.0	37.5	140	14.0	1.1	100	√	√	√	PHE844RR6680M
1.0	15.0	26.0	41.0	37.5	119	17.0	0.92	100	√	√	√	PHE844RR7100M
1.5	19.0	36.0	41.0	37.5	91	28.5	0.74	100	√	√	√	PHE844RR7150M
2.2	21.0	38.0	41.0	37.5	84	34.4	0.60	100	√	√	√	PHE844RR7220M

APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
ENEC	EN 132400	SE/0140-1
UL	UL 1283 (U _R =480 VAC)	E100117
	UL 1414 (U _R = 250 VAC)	E73869
CSA	C 22.2 No. 8-M1986 (U _R =480 VAC)	E100117
(cUL recognition)	C 22.2 No. 1-M90 (U _R =250 VAC)	E73869

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Capacitance tolerance code
- Rated voltage
- X1
- Approval marks
- Manufacturing date code
- IEC climatic category
- Passive flammability class

ORDERING INFORMATION

Article code

1st block

See article table
Pos. 13 Capacitance tolerance code:
M = ± 20% standard
K = ± 10% option

2nd block

If not standard lead length,
add R06 – R30 in pos. 14–16).
For reel taped, add 17T0 or 17T1
in pos. 14–15.
For packing on trays (6 mm lead length),
add L2 in pos. 17–18.

P H E 8 4 4 R R 6 6 8 0 M

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

PACKING

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

Reels with taped capacitors are packed 10 in a box with dimension 370 x 370 x 560 mm. Quantity/reel according to article table. The standard quantity/reel is for 360 mm reel. If 500 mm reel is required, it must be specified when ordering and the quantity is 2 x the given quantity.

DATA SHEET PHE844

Specifications subject to change without notice

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