869-363 to 454.

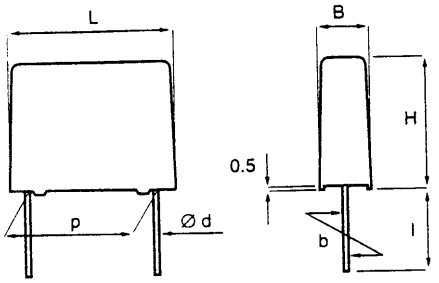
PHE 830 X2, Across-the-line, Antenna-coupling, Line-by-pass
0.01 – 2.2 µF 250 VAC* +100°C

Typical applications

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

Construction

Series winding of metallized polyester, encapsulated in self-extinguishing material meeting the requirements of UL 94 V–0



p	d	std l	max l	b
15.0 ±0.4	0.8	17	50	±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

Tolerance in lead length
< 30 mm $^{+0}_{-1}$ mm
≥ 30 mm $^{+5}_{-0}$ mm

General data

Capacitance range	0.01 – 2.2 µF
Capacitance tolerance	± 20% standard, ± 10% option
Rated voltage	250 VAC* 50/60 Hz
Temperature range	–40 to +100°C
Climatic category	40/100/56/C
Approvals	S, N, D, FI, VDE, SEV, ÖVE, IMQ, UL, CSA

*) Approvals pending for 275 VAC.

Electrical characteristics

Dissipation factor
≤ 1.0% at 1 kHz

Test voltage between terminals
The 100% screening factory test is carried out at 2150 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 MΩ
C > 0.33 µF: ≥ 10 000 ΩF

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 temp.	
Vibration	IEC68–2–6 Test Fc	3 directions at 2 hours each, 10–55 Hz at 0.75 mm or 98 m/s²	No visible damage No open or short circuit
Bump	IEC68–2–29 Test Eb	1000 bumps at 390 m/s²	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

REVOX RIFA

Article table PHE 830

C_R* µF	Max dimensions in mm B	H	L	p	Quantity per package Bulk pcs	Tray pcs	reel taped pcs	Weight g	f_o MHz	Max dU/dt V/µs	Approvals S	N	D	FI	VDE	SEV	ÖVE	IMQ	UL	CSA	Article code 1st block
0.01	5.5	10.5	18.0	15.0	500		600	1.5	13.0	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5100M
0.015	5.5	10.5	18.0	15.0	500		600	1.5	11.0	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5150M
0.022	5.5	10.5	18.0	15.0	500		600	1.5	9.0	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5220M
0.033	5.5	10.5	18.0	15.0	500		600	1.5	7.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5330M
0.047	5.5	12.5	18.0	15.0	500		600	1.7	6.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5470M
0.068	6.5	12.5	18.0	15.0	500		500	2.0	5.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB5680M
0.1	7.5	14.5	18.0	15.0	500		400	2.7	4.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MB6100M
0.1	6.5	14.5	26.0	22.5		440		3.3	4.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MD6100M
0.15	6.5	14.5	26.0	22.5		440		3.3	3.9	100	√	√	√	√	√	√	√	√	√	√	PHE 830MD6150M
0.22	8.0	16.0	26.0	22.5		352		4.5	2.7	100	√	√	√	√	√	√	√	√	√	√	PHE 830MD6220M
0.33	9.0	18.5	26.0	22.5		308		5.5	2.5	100	√	√	√	√	√	√	√	√	√	√	PHE 830MD6330M
0.47	11.0	21.5	26.0	22.5		253		8.0	2.0	100	√	√	√	√	√	√	√	√	√	√	PHE 830MD6470M
0.47	10.5	20.5	31.5	27.5		216		9.0	1.9	100	√	√	√	√	√	√	√	√	√	√	PHE 830MF6470M
0.68	11.5	22.5	31.5	27.5		198		10.5	1.6	100	√	√	√	√	√	√	√	√	√	√	PHE 830MF6680M
1.0	14.5	24.5	31.5	27.5		153		14.5	1.3	100	√	√	√	√	√	√	√	√	√	√	PHE 830MF7100M
1.5	17.5	28.0	31.5	27.5		126		20.0	0.8	100	√	√	√	√	√	√	√	√	√	√	PHE 830MF7150M
1.5	15.0	26.0	41.0	37.5		119		21.0	0.7	100	√	√	√	√	√	√	√	√	√	√	PHE 830MR7150M
2.2	16.5	32.0	41.0	37.5		105		28.0	0.6	100	√	√	√	√	√	√	√	√	√	√	PHE 830MR7220M

* The complete serie includes C values according to the E12 series. Details on request.

Approvals/Reference documents

Country	Specification	Approval reference
S = Sweden	EN 132400*	962300801
N = Norway	EN 132400*	P95101253
D = Denmark	EN 132400*	303660
FI = Finland	EN 132400*	181586-01
VDE = Germany	EN 132400*	89759
SEV = Switzerland	EN 132400*	95.7 70443.01
ÖVE = Austria	ÖVE-F22/1974	0683-038-00
IMQ = Italy	EN 132400*	V 3415
UL = USA	UL 1283 (U_R=250 VAC)	E 100117
	UL 1414 (U_R = 125 VAC)	E 73869
CSA = Canada	C 22.2 No. 8-M1986 (U_R=250 VAC)	53108

*Approvals according to EN 132400 (IEC 384-14, 2nd edition,1993).
Old national approvals, replaced by EN 132400, still apply.
Detailed information on request.

Marking

- *RIFA*
- *RIFA article code*
- *Rated capacitance*
- *Capacitance tolerance code*
- *Rated voltage*
- *X2*
- *SH, self healing capacitor*
- *Approval marks*
- *Manufacturing code (year, month)*
- *IEC climatic category*
- *Passive flammability class*

Ordering information

Article code

1st block	**2nd block**
See article table Pos. 13 Capacitance tolerance code: M = ± 20% standard K = ± 10% option	If not standard lead length, add R06 – R50 in pos. 14–16) For reel taped, add T0 in pos. 14–15 For packing on trays (6 mm lead length), add L2 in pos. 17–18.
P H E 8 3 0 M B 5 3 3 0 M	**R 0 6**
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 230 × 155 × 72 mm. Quantity/package as per article table.

Reels with taped capacitors are packed 10 in a box with dimension 600 × 400 × 400 mm. Quantity/reel according to article table.