PHE448

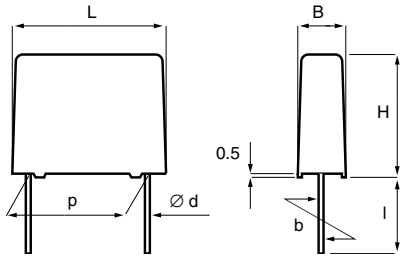
• Pulse capacitor, polypropylene film/foil

TYPICAL APPLICATIONS

High frequency and high voltage applications, requiring capacitors with extremely high current handling capability, i.e. high dU/dt values.

CONSTRUCTION

Polypropylene film dielectric with aluminum foil and metallized film as electrodes, encapsulated in self-extinguishing material meeting the requirements of UL94V-0.



p	d	std l	max l	b
15.0 ± 0.4	0.8	6^{-1}	30	±0.4

GENERAL DATA

Rated voltage U_R, VDC	1600	2000
Rated voltage U_R, VAC	650	700
Capacitance range, nF	1.5–10	0.1–3.3
Capacitance values	In accordance with E12 series	
Capacitance tolerance	±5 % standard. Other tolerances on request	
Category temperature range	-55 °C to +105 °C	
Rated temperature	+85° C	
Voltage derating	The rated voltage is decreased with 1.3%/°C from +85 °C.	
Climatic category	55/105/56	
Voltage proof	2 x U_R, 2s	
Insulation resistance	Measured at +23 °C, 100 VDC, 60s Between terminals: ≥ 100 000 MΩ Between terminals and case: ≥ 100 000 MΩ	
Dissipation factor tanδ	Max values at +23°C 1 kHz: 0.03% 10 kHz: 0.05% 100 kHz: 0.1%	
Pulse rise time	The capacitors can withstand an unlimited number of pulses with a dU/dt according to the article table.	

ORDERING INFORMATION

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

MARKING

- RIFA
- Article code
- Rated capacitance according to IEC 60062
- Capacitance tolerance code
- Rated voltage
- Manufacturing date code (year, month)

PACKING

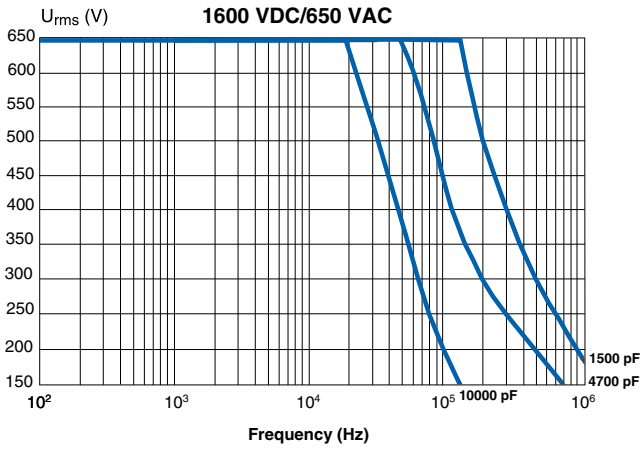
Capacitors in standard design are packed bulk in a box with dimensions 245 x 145 x 80 mm. Quantity/package as per article table.

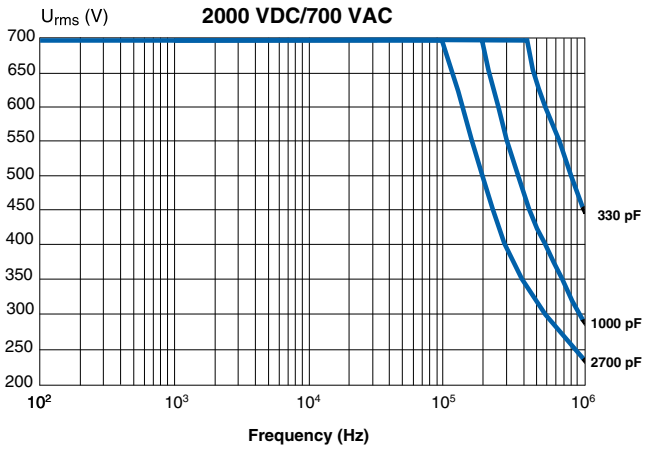
Reels with taped capacitors are packed 10 in a box with dimensions 370 x 370 x 560 mm. The standard quantity/reel is for 360 mm reel. If 500 mm reel is required, it must be specified when ordering and the quantity is 2 x the given quantity.

ARTICLE TABLE

Capacitance nF	Max dimensions in mm B	H	L	p	Quantity per package Bulk	Tray	Reel	Ammo	Weight g	Max dU/dt V/µs	Rthha °C/W 85 °C 0.2 m/s	Article code
1600 VDC/650 VAC												
1.5	5.5	10.5	18.0	15.0	1000		600		1.3	15000	87	PHE448RB4150JR06
1.8	5.5	10.5	18.0	15.0	1000		600		1.4	15000	86	PHE448RB4180JR06
2.2	5.5	10.5	18.0	15.0	1000		600		1.5	15000	84	PHE448RB4220JR06
2.7	6.5	12.5	18.0	15.0	1000		500		1.7	15000	82	PHE448RB4270JR06
3.3	6.5	12.5	18.0	15.0	1000		500		1.7	15000	82	PHE448RB4330JR06
3.9	6.5	12.5	18.0	15.0	1000		500		1.7	15000	82	PHE448RB4390JR06
4.7	6.5	12.5	18.0	15.0	1000		500		1.7	15000	82	PHE448RB4470JR06
5.6	7.5	14.5	18.0	15.0	800		400		2.3	15000	78	PHE448RB4560JR06
6.8	7.5	14.5	18.0	15.0	800		400		2.3	15000	78	PHE448RB4680JR06
8.2	8.5	16.0	18.0	15.0	600		400		2.5	15000	70	PHE448RB4820JR06
10.0	8.5	16.0	18.0	15.0	600		400		2.5	15000	70	PHE448RB5100JR06
2000 VDC/700 VAC												
0.10	5.5	10.5	18.0	15.0	1000		600		1.3	25000	87	PHE448SB3100JR06
0.12	5.5	10.5	18.0	15.0	1000		600		1.3	25000	87	PHE448SB3120JR06
0.15	5.5	10.5	18.0	15.0	1000		600		1.3	25000	87	PHE448SB3150JR06
0.18	5.5	10.5	18.0	15.0	1000		600		1.3	25000	87	PHE448SB3180JR06
0.22	5.5	10.5	18.0	15.0	1000		600		1.3	25000	87	PHE448SB3220JR06
0.27	5.5	10.5	18.0	15.0	1000		600		1.4	25000	87	PHE448SB3270JR06
0.33	5.5	10.5	18.0	15.0	1000		600		1.4	25000	86	PHE448SB3330JR06
0.39	5.5	10.5	18.0	15.0	1000		600		1.4	25000	86	PHE448SB3390JR06
0.47	5.5	10.5	18.0	15.0	1000		600		1.4	25000	86	PHE448SB3470JR06
0.56	5.5	10.5	18.0	15.0	1000		600		1.5	25000	85	PHE448SB3560JR06
0.68	5.5	10.5	18.0	15.0	1000		600		1.5	25000	85	PHE448SB3680JR06
0.82	5.5	10.5	18.0	15.0	1000		600		1.5	25000	85	PHE448SB3820JR06
1.0	5.5	10.5	18.0	15.0	1000		600		1.5	25000	84	PHE448SB4100JR06
1.2	6.5	12.5	18.0	15.0	1000		500		1.6	25000	82	PHE448SB4120JR06
1.5	6.5	12.5	18.0	15.0	1000		500		1.7	25000	82	PHE448SB4150JR06
1.8	7.5	14.5	18.0	15.0	800		400		2.3	25000	78	PHE448SB4180JR06
2.2	8.5	16.0	18.0	15.0	600		400		2.5	25000	70	PHE448SB4220JR06
2.7	8.5	16.0	18.0	15.0	600		400		2.5	25000	70	PHE448SB4270JR06
3.3	9.5	17.5	18.0	15.0	500		300		4.2	25000	60	PHE448SB4330JR06

DERATING OF U_{RMS} VS FREQUENCY, +85°C AMBIENT TEMPERATURE AND 10°C INTERNAL HEATING, TYPICAL VALUES





More simulation possibilities in PCCAD. See page 204.