

# PME291

- EMI suppressor, class Y2, metallized paper
- 0.001 – 0.022  $\mu\text{F}$ , 300 VAC, +115 °C

- Self-extinguishing encapsulation. The material is recognized according to UL 94 V-0.
- Very precise positioning of the leads in relation to the case giving efficient utilisation of PC board space.
- Excellent self-healing properties. Ensures long life even when subjected to frequent overvoltages.
- High dU/dt capability.
- Good resistance to ionisation due to impregnated dielectric.
- The capacitors meet the most stringent IEC humidity class, 56 days.
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation.

## TYPICAL APPLICATIONS

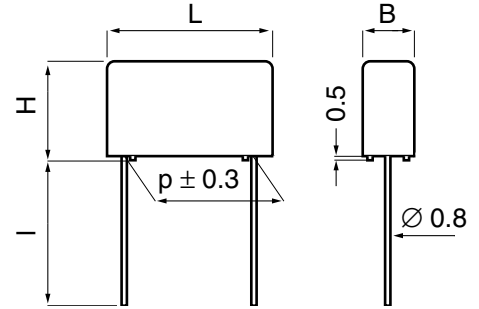
The capacitors are intended for use as interference suppressors in Y2 applications, line-to-earth.

## CONSTRUCTION

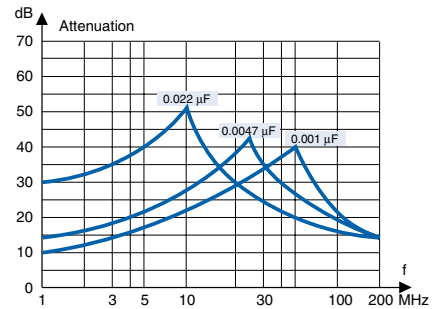
Multi-layer metallized paper. Encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0.

## GENERAL DATA

<b>Rated voltage</b>	300 VAC 50/60 Hz
<b>Capacitance range</b>	0.001 – 0.022 $\mu\text{F}$
<b>Capacitance tolerance</b>	$\pm 20\%$
<b>Temperature range</b>	-40 to +115°C
<b>Climatic category IEC</b>	40/115/56/B
<b>Approvals</b>	S, VDE, UL, CSA
<b>Dissipation factor <math>\tan\delta</math></b>	$\leq 1.3\%$ at 1 kHz
<b>Insulation resistance</b>	12000 M $\Omega$ Measured at 500 VDC after 60 s, +23°C
<b>Resonance frequency</b>	Tabulated self-resonance frequencies $f_0$ refer to 5 mm lead length.
<b>In DC applications</b>	Recommended voltage: $\leq 1000$ VDC
<b>Test voltage between terminals</b>	The 100% screening factory test is carried out at 2000 VAC, 50 Hz, 2 s and at 3000 VDC, 1 s. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test.



l = standard : 30 +5/-0 mm  
option : short leads, tolerance +0/-1 mm (standard 6 mm, code R06)  
Other lead lengths on request



Suppression versus frequency. Typical values.

## ENVIRONMENTAL TEST DATA

<b>Vibration</b>	IEC 60068-2-6 Test Fc	3 directions at 2 hour each 10 – 500 Hz at 0.75 mm or 98 m/s <sup>2</sup>	No visible damage No open or short circuit
<b>Bump</b>	IEC 60068-2-29 Test Eb	4000 bumps at 390 m/s <sup>2</sup>	No visible damage No open or short circuit
<b>Solderability</b>	IEC 60068-2-20, Test Ta	Solder globule method	Wetting time < 1 s
<b>Active flammability</b>	EN 132400		
<b>Passive flammability</b>	IEC 60384-14 (1993) EN 132400		
<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 reel				$f_o$ MHz	Max $dU/dt$ V/ $\mu\text{s}$	Approvals				Article code
	B	H	L	p	R30 pcs	R06 pcs	taped pcs	Weight g			S	VDE	UL	CSA	
0.0010	4.5	11.5	13.0	10.0	800	1600	700	1.2	56	2000	√	√	√	√	PME291EA4100MR30
0.0015	4.5	10.5	13.0	10.0	800	1600	700	1.1	46	2000	√	√	√	√	PME291EA4150MR30
0.0022	5.5	10.5	13.0	10.0	800	1200	600	1.3	39	2000	√	√	√	√	PME291EA4220MR30
0.0025	5.5	10.5	13.0	10.0	800	1200	600	1.3	36	2000	√	√	√	√	PME291EA4250MR30
0.0033	5.5	12.5	13.0	10.0	800	1200	600	1.5	31	2000	√	√	√	√	PME291EA4330MR30
0.0039	5.5	12.5	13.0	10.0	800	1200	600	1.5	28	2000	√	√	√	√	PME291EA4390MR30
0.0047	5.5	13.5	13.0	10.0	600	1200	600	1.6	26	2000	√	√	√	√	PME291EA4470MR30
0.0047	5.5	13.0	18.0	15.0	500	1000	600	1.9	23	1400	√	√	√	√	PME291EB4470MR30
0.0068	5.5	14.0	18.0	15.0	500	800	600	2.0	18	1400	√	√	√	√	PME291EB4680MR30
0.010	7.5	13.5	18.0	15.0	400	600	400	2.6	15	1400	√	√	√	√	PME291EB5100MR30
0.015	8.5	14.5	18.0	15.0	250	500	400	3.0	12	1400	√	√	√	√	PME291EB5150MR30
0.022	8.5	17.0	18.0	15.0	250	400	400	3.6	9.8	1400	√	√	√	√	PME291EB5220MR30

## APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
S	EN 132400	9909056/01
VDE	EN 132400	123537
UL	UL 1414 (250 VAC)	E73869
CSA	C 22.2 No. 8 (250 VAC)	53108

## MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- Y2
- Climatic category according to IEC 60068-1, appendix A
- Passive flammability class
- Approval marks
- Manufacturing code (year, month)

## ORDERING INFORMATION

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

## PACKING

Capacitors in standard design (lead length 30 mm) and with lead length 5 or 6 mm 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 dimension 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.