

PME291

- EMI suppressor, class Y2, metallized paper
- 0.001 – 0.022 μF , 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

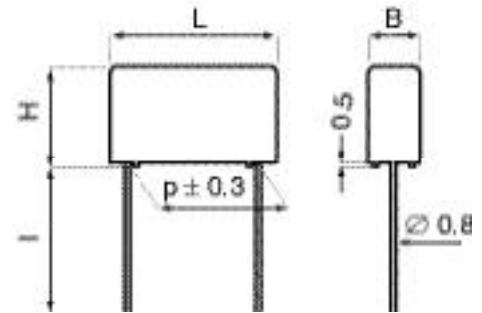
The capacitors are intended for use as interference suppressors in Y2 applications, line-to-earth.

CONSTRUCTION

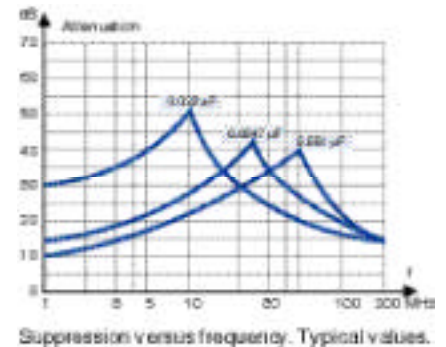
Multi-layer metallized paper. Encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0.

GENERAL DATA

Rated voltage	300 VAC 50/60 Hz
Capacitance range	0.001 – 0.022 μF
Capacitance tolerance	$\pm 20\%$
Temperature range	-40 to +115°C
Climatic category IEC	40/115/56/B
Approvals	S, VDE, UL, CSA
Dissipation factor $\tan \delta$	$\leq 1.3\%$ at 1 kHz
Insulation resistance	12000 M Ω Measured at 500 VDC after 60 s, +23°C
Resonance frequency	Tabulated self-resonance frequencies f_0 refer to 5 mm lead length.
In DC applications	Recommended voltage: ≤ 1000 VDC
Test voltage between terminals	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



ENVIRONMENTAL TEST DATA

Vibration	IEC 60068-2-6 Test Fc	3 directions at 2 hour each 10 – 500 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	4000 bumps at 390 m/s ²	No visible damage No open or short circuit
Solderability	IEC 60068-2-20, Test Ta	Solder globule method	Wetting time < 1 s
Active flammability	EN 132400		
Passive flammability	IEC 60384-14 (1993) EN 132400		
Humidity	IEC 60068-2-3, Test Ca	+40°C and 90 – 95% R.H.	56 days

ARTICLE TABLE

Capacitance μF	Max dimensions in mm				Quantity per package			Weight g	f_o MHz	Max dU/dt V/ μs	Approvals				Article code 1 st block
	B	H	L	p	R30 pcs	R06 pcs	reel taped pcs				S	VDE	UL	CSA	
0.0010	4.5	11.5	13.0	10.0	800	1600	700	1.2	56.0	2000	✓	✓	✓	✓	PME291EA4100M
0.0015	4.5	10.5	13.0	10.0	800	1600	700	1.1	46.0	2000	✓	✓	✓	✓	PME291EA4150M
0.0022	5.5	10.5	13.0	10.0	800	1200	600	1.3	39.0	2000	✓	✓	✓	✓	PME291EA4220M
0.0025	5.5	10.5	13.0	10.0	800	1200	600	1.3	36.0	2000	✓	✓	✓	✓	PME291EA4250M
0.0033	5.5	12.5	13.0	10.0	800	1200	600	1.5	31.0	2000	✓	✓	✓	✓	PME291EA4330M
0.0039	5.5	12.5	13.0	10.0	800	1200	600	1.5	28.0	2000	✓	✓	✓	✓	PME291EA4390M
0.0047	5.5	13.5	13.0	10.0	600	1200	600	1.6	26.0	2000	✓	✓	✓	✓	PME291EA4470M
0.0047	5.5	13.0	18.0	15.0	500	1000	600	1.9	23.0	1400	✓	✓	✓	✓	PME291EB4470M
0.0068	5.5	14.0	18.0	15.0	500	800	600	2.0	18.0	1400	✓	✓	✓	✓	PME291EB4680M
0.010	7.5	13.5	18.0	15.0	400	600	400	2.6	15.0	1400	✓	✓	✓	✓	PME291EB5100M
0.015	8.5	14.5	18.0	15.0	250	500	400	3.0	12.0	1400	✓	✓	✓	✓	PME291EB5150M
0.022	8.5	17.0	18.0	15.0	250	400	400	3.6	9.8	1400	✓	✓	✓	✓	PME291EB5220M

P = Approvals pending

APPROVALS/REFERENCE DOCUMENTS

Country	Specification	Approval reference
S = Sweden	EN 132400	9909056/01
VDE = Germany	EN 132400	123537
UL = USA	UL 1414 (250 VAC)	E73869
CSA = Canada	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

Article code

1st block

See article table
Pos. 13, capacitance tolerance code:
M = $\pm 20\%$

2nd block

Options:
Short leads: e.g. 6 mm, add R06
in pos. 14–16.
Reel taped: Add T0 or T1 in pos. 14–15.

P M E 2 9 1 E A 4 2 2 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

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.