PME271E

- **EMI suppressor, class X1, metallized paper**
- **0.01 – 0.22 µF, 300 VAC, +110 °C**

RoHS Compliant

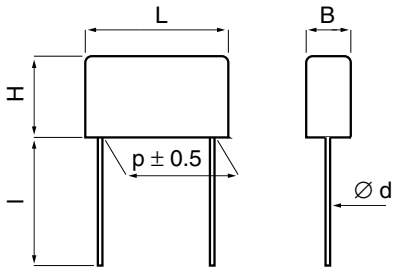
- The highest possible safety regarding active and passive flammability.
- Self-extinguishing UL 94V-0 encapsulation material.
- Excellent self-healing properties. Ensures long life even when subjected to frequent overvoltages.
- Good resistance to ionisation due to impregnated dielectric.
- High dU/dt capability.
- Small dimensions.
- Safety approvals for worldwide use.
- 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 X1 (across-the-line) applications.

CONSTRUCTION

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



d = 0.6 for p = 10.2
0.8 for p = 15.2, 20.3, 22.5
1.0 for p = 25.4

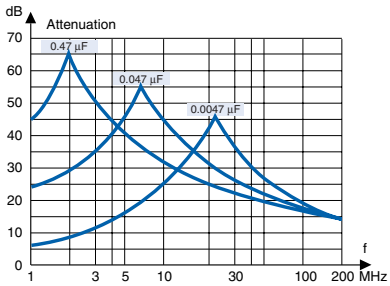
l = standard: 30 +5/-0 mm (code R30)

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

option 2: 30 mm insulated solid leads, ordering code: replace R30 with R300PS in std P/N

TECHNICAL DATA

Rated voltage VAC, 50/60Hz	300
Capacitance range µF	0.01–0.22
Temperature range °C	–40/+110
Climatic category IEC	40/110/56/B
Capacitance tolerance	± 10% for C > 0.1 µF, code K. ± 20% for C ≤ 0.1 µF, code M
Approvals	ENEC, UL
Dissipation factor tanδ	≤ 1.3 % at 1 kHz
Insulation resistance	C ≤ 0.33 µF ≥ 12000 MΩ C > 0.33 µF ≥ 4000 s Measured at 500 VDC after 60 s, +23°C
In DC applications	Recommended voltage: ≤ 630 VDC
Resonance frequency	Tabulated self-resonance frequencies f_0 refer to 5 mm lead lengths.
Test voltage between	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.



Suppression versus frequency. Typical values.

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/s²	No visible damage, No open or short circuit	
Bump	IEC 60068-2-29, Test Eb	4000 bumps at 390 m/s²	No visible damage, No open or short circuit	
Solderability	IEC 60068-2-20, Test Ta	Solder globule method	Wetting time	for d ≤ 0.8 < 1 s for d > 0.8 < 1.5 s
Active flammability	EN/IEC 60384-14:2005			
Passive flammability	EN/IEC 60384-14:2005			
Humidity	IEC 60068-2-3, Test Ca	+40°C and 90 – 95% R.H.	56 days	

ARTICLE TABLE

Capacitance µF	Max dimensions in mm B	H	L	p	Quantity per package R30 pcs	R06 pcs	reel taped pcs	Weight g	f_o MHz	Max dU/dt V/µs	Article code
0.010	5.2	10.5	18.5	15.2	500	1000	600	1.7	16	1200	PME271E510MR30
0.015	5.2	10.5	18.5	15.2	500	1000	600	1.7	13	1200	PME271E515MR30
0.022	7.3	13.0	19.0	15.2	400	800	400	3.0	9.8	1200	PME271E522MR30
0.033	7.3	13.0	19.0	15.2	400	800	400	3.0	7.0	1200	PME271E533MR30
0.047	8.5	14.3	18.5	15.2	300	500	350	3.8	6.4	1200	PME271E547MR30
0.068	7.6	14.0	24.0	20.3	250	1500	250	4.5	5.2	600	PME271E568MR30
0.10	11.3	16.5	24.0	20.3	150	1000	180	7.0	4.1	600	PME271E610MR30
0.068	8.0	17.0	27.0	22.5	200	1200	250	5.5	4.7	600	PME271ED5680MR30
0.10	8.0	17.0	27.0	22.5	200	1200	250	5.5	4.1	600	PME271ED6100MR30
0.15	10.0	19.0	27.0	22.5	150	1000	200	5.5	3.2	600	PME271ED6150KR30
0.22	12.0	22.0	27.0	22.5	100	800		5.5	2.5	600	PME271ED6220KR30
0.15	10.6	16.1	30.5	25.4	150	1000		8.6	3.3	400	PME271E615KR30
0.22	12.1	19.0	30.5	25.4	100	800		10.0	2.6	400	PME271E622KR30

APPROVALS

Certification Body	Specification	
ENEC	EN/IEC 60384-14:2005	
UL	UL 1283	(U_R = 250 VAC)

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- X1
- SH, for self-healing
- 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 11.