

# PME271M/E

- EMI suppressor, classes X1 and X2, metallized paper
- 0.001 – 0.6  $\mu\text{F}$ , 275/300 VAC, +110 °C

- 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.

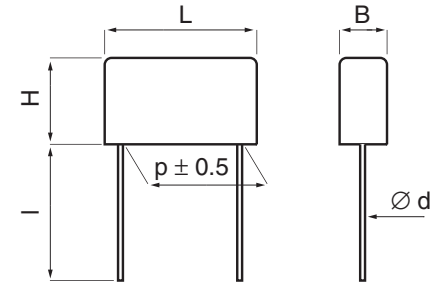
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation.

## TYPICAL APPLICATIONS

The capacitors are intended for use as interference suppressors in X1 or X2 (across-the-line) applications.

## CONSTRUCTION

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

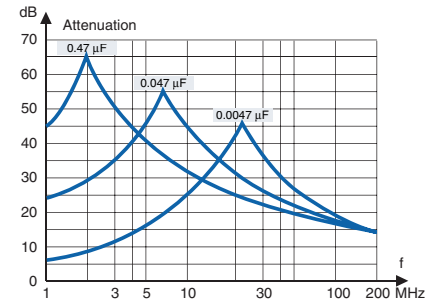


d = 0.6 for p = 10.2  
0.8 for p = 15.2, 20.3, 22.5  
1.0 for p = 25.4

l = standard: 30 +5/-0 mm (code R30)  
option: short leads, tolerance +0/-1 mm (standard 6 mm, code R06)  
Other lead lengths on request

## TECHNICAL DATA

	PME271M	PME271E
Rated voltage VAC, 50/60Hz	275	300
Capacitance range $\mu\text{F}$	0.001–0.6	0.01–0.22
Temperature range °C	-40/+110	-40/+110
Climatic category IEC	40/110/56/B	40/110/56/B
Capacitance tolerance	± 10% for C > 0.1 $\mu\text{F}$ , code K. ± 20% for C ≤ 0.1 $\mu\text{F}$ , code M	
Approvals	S, N, D, FI, VDE, SEV, IMQ, UL, CSA	
Dissipation factor tan $\delta$	≤ 1.3 % at 1 kHz	
Insulation resistance	C ≤ 0.33 $\mu\text{F}$ ≥ 12000 M $\Omega$ C > 0.33 $\mu\text{F}$ ≥ 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 <sub>0</sub> refer to 5 mm lead lengths.	
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.	



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/s <sup>2</sup>	No visible damage, No open or short circuit
Bump	IEC 60068-2-29, Test Eb 4000 bumps at 390 m/s <sup>2</sup>	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 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 $\mu\text{F}$	Max dimensions in mm				Quantity per package			Weight g	$f_o$ MHz	Max $dU/dt$ V/ $\mu\text{s}$	Article code
	B	H	L	p	R30 pcs	R06 pcs	reel taped pcs				
<b>CLASS X2 275 VAC +110 °C PME271 M</b>											
0.0010	3.9	7.5	13.5	10.2	1000	2000	700	0.7	53	1200	PME271M410MR30
0.0015	3.9	7.5	13.5	10.2	1000	2000	700	0.7	44	1200	PME271M415MR30
0.0022	3.9	7.5	13.5	10.2	1000	2000	700	0.7	37	1200	PME271M422MR30
0.0033	4.1	8.2	13.5	10.2	1000	2000	600	0.9	30	1200	PME271M433MR30
0.0047	5.1	10.5	13.5	10.2	800	1600	600	1.2	24	1200	PME271M447MR30
0.0068	5.2	10.5	18.5	15.2	500	1000	600	1.7	19	1200	PME271M468MR30
0.010	5.2	10.5	18.5	15.2	500	1000	600	1.7	16	1200	PME271M510MR30
0.015	5.2	10.5	18.5	15.2	500	1000	600	1.7	13	1200	PME271M515MR30
0.022	6.0	12.5	18.5	15.2	400	800	400	3.0	10	1200	PME271M522MR30
0.033	6.0	12.5	18.5	15.2	400	800	400	3.0	8.4	1200	PME271M533MR30
0.047	6.0	12.5	18.5	15.2	400	800	400	3.0	7.0	1200	PME271M547MR30
0.068	7.8	13.5	18.5	15.2	400	800	400	3.3	5.6	1200	PME271M568MR30
0.10	8.5	14.3	18.5	15.2	300	500	350	3.8	4.3	1200	PME271MB6100MR30
0.10	7.6	14.0	24.0	20.3	250	1500	250	4.0	4.1	600	PME271M610MR30
0.15	9.0	15.0	24.0	20.3	200	1200	250	5.0	3.4	600	PME271M615KR30
0.22	11.3	16.5	24.0	20.3	150	1000	180	7.0	2.7	600	PME271M622KR30
0.10	8.0	17.0	27.0	22.5	200	1200	250	5.5	3.9	600	PME271MD6100MR30
0.15	8.0	17.0	27.0	22.5	200	1200	250	5.5	3.3	600	PME271MD6150KR30
0.22	10.0	19.0	27.0	22.5	150	1000	200	7.5	2.6	600	PME271MD6220KR30
0.27	12.0	22.0	27.0	22.5	100	800		10.0	2.3	400	PME271MD6270KR30
0.33	12.0	22.0	27.0	22.5	100	800		10.0	2.1	400	PME271MD6330KR30
0.27	10.5	17.3	30.5	25.4	100	1000		8.5	2.4	400	PME271M627KR30
0.33	12.1	19.0	30.5	25.4	100	800		10.0	2.1	400	PME271M633KR30
0.47	15.3	22.0	30.5	25.4	75	600		15.0	1.8	400	PME271M647KR30
0.60	15.3	22.0	30.5	25.4	75	600		15.0	1.6	400	PME271M660KR30
<b>CLASS X1 300 VAC +110 °C PME271 E</b>											
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/REFERENCE DOCUMENTS

## MARKING

Certification Body	Specification	Approval reference	
S	EN 132400	9834227-01 (X2), 9821105-01 (X1),	<ul style="list-style-type: none"> <li>• RIFA</li> <li>• RIFA article code</li> <li>• Rated capacitance</li> <li>• Rated voltage</li> <li>• X2 or X1</li> <li>• SH, for self-healing</li> <li>• Climatic category according to IEC 60068-1, appendix A</li> <li>• Passive flammability class</li> <li>• Approval marks</li> <li>• Manufacturing code (year, month)</li> </ul>
N	EN 132400	P98102279 (X2), P98101874 (X1)	
D	EN 132400	308048 (X2), 307886 (X1),	
FI	EN 132400	203301 (X2), 202782 (X1),	
VDE	EN 132400	118230 (X2), 117365 (X1),	
SEV	EN 132400	99.7 70053.01 (X2), 99.7 70083.01 (X1)	
IMQ	EN 132400	V 4699 (X2), V 4698 (X1),	
UL	UL 1283 ( $U_R = 250$ VAC) UL 1414 ( $U_R = 250$ VAC)	E 100117 (X2, X1) E 73869 (X2)	
CSA	C 22.2 No. 1 ( $U_R = 250$ VAC)	53108 (X2)	

## ORDERING INFORMATION

The article code for the standard part is given in the article table.  
For other options, see page 12.