

# 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

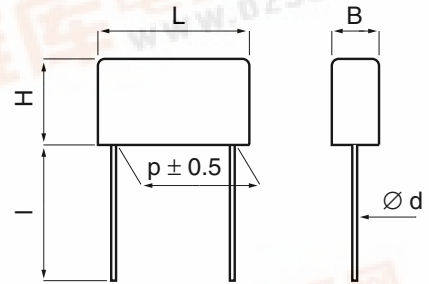
The capacitors are intended for use as interference suppressors in X1 or X2 (across-the-line) applications.

## CONSTRUCTION

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

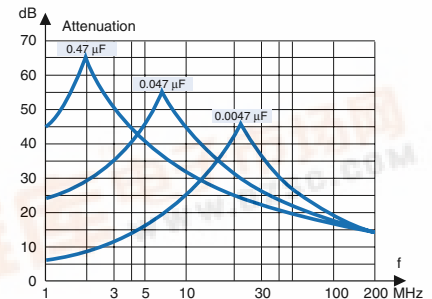
## TECHNICAL DATA

	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	$\pm 10\%$ for $C > 0.1 \mu\text{F}$ , code K. $\pm 20\%$ for $C \leq 0.1 \mu\text{F}$ , code M	
Approvals	S, N, D, FI, VDE, SEV, IMQ, UL, CSA	
Dissipation factor $\tan\delta$	$\leq 1.3\%$ at 1 kHz	
Insulation resistance	$C \leq 0.33 \mu\text{F} \geq 12000 \text{ M}\Omega$ $C > 0.33 \mu\text{F} \geq 4000 \text{ s}$ Measured at 500 VDC after 60 s, +23°C	
In DC applications	Recommended voltage: $\leq 630 \text{ VDC}$	
Resonance frequency	Tabulated self-resonance frequencies $f_0$ 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.	



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

$l =$  standard  $30 \pm 5/0 \text{ mm}$  (code R30)  
option short leads, tolerance  $\pm 0/-1 \text{ mm}$  (standard 6 mm, code R06)  
Other lead lengths on request.



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 $d \leq 0.8 < 1 \text{ s}$ for $d > 0.8 < 1.5 \text{ s}$
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





## APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
S	EN 132400	9834227-01 (X2), 9821105-01 (X1),
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)

## MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- X2 or X1
- SH, for self-healing
- Climatic category according to IEC 60068-1, appendix A
- Passive flammability class
- Approval marks
- Manufacturing code (year, month)

## PACKING

Capacitors in standard design (lead length 30 mm) and with  $L < 24$  mm and 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.

Capacitors with  $L \geq 24$  mm and lead length 5 or 6 mm are packed on trays piled in a box with dimensions 300 x 260 x 195 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.

## ORDERING INFORMATION

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