

# PME 271

- High dU/dt capability
- Excellent self-healing properties. Ensures long life even when subject to frequent overvoltages
- Good resistance to ionisation due to impregnated dielectric
- Small dimensions
- Approved acc. to French standard—LNZ 4404A

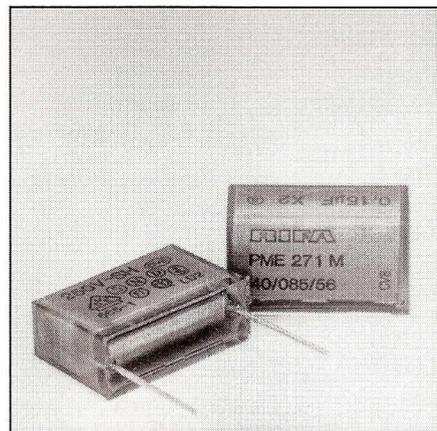
- Safety approvals in ten (10) countries
- The capacitors meet the most stringent IEC humidity class, 56 days
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation

## Application

The capacitors are intended for use as interference suppressors in X1, X2 (across-the-line) and Y (line-to-earth) applications.

## Basic design

Multi-layer metallized paper impregnated with and encased in epoxy resin.



## Specification

Capacitance range	X2-capacitors 0.001—0.6 $\mu\text{F}$ X1-capacitors 0.01—0.22 $\mu\text{F}$ Y-capacitors 0.001—0.047 $\mu\text{F}$
Rated voltage	250 VAC for PME 271M and PME 271Y 300 VAC for PME 271E, UL=250 VAC
Climatic category	IEC 40/085/56 — PME 271M and PME 271Y IEC 40/100/56 — PME 271E
Temperature range	−40 to +85°C / −40 to +100°C
Capacitance tolerance	±10% for $C > 0.1 \mu\text{F}$ , code K ±20% for $C \leq 0.1 \mu\text{F}$ , code M
Approvals	SEMKO, NEMKO, DEMKO, EI, VDE, SEV, ÖVE, IMQ, UL, CSA

## Technical data

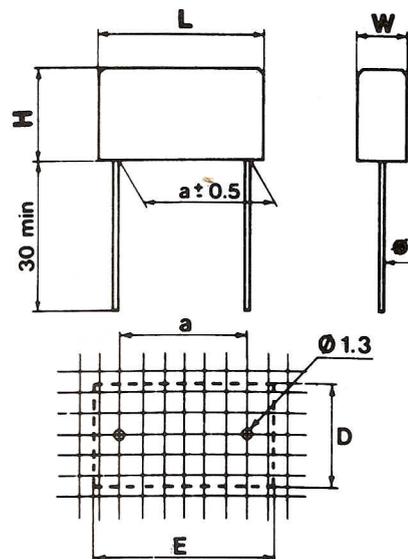
**Dissipation factor**  
 $\leq 1.3\%$  at 1 kHz

**Insulation resistance**  
 $C \leq 0.33 \mu\text{F} \geq 12000 \text{ M}\Omega$   
 $C > 0.33 \mu\text{F} \geq 4000 \text{ }\Omega\text{F}$   
 Measured at 500 VDC after 60 s, +23°C

**In DC applications**  
 Recommended voltage:  
 PME 271 M,E  $\leq 630 \text{ VDC}$   
 PME 271 Y  $\leq 1000 \text{ VDC}$

**Resonance frequency**  
 Tabulated self-resonance frequencies  $f_0$  refer to 5 mm lead lengths.

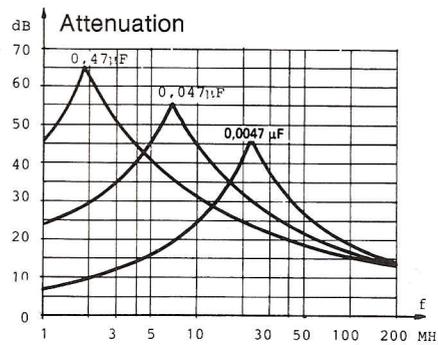
**Test voltage between terminals**  
 The RIFA 100% screening factory test is carried out at 1500—2000 VDC for X2 and X1 capacitors and at 2700 VDC for Y capacitors. The voltages are selected to meet the approval requirements. All electrical characteristics are checked after the voltage tests.



$\varnothing = 0.6$  (23 S.W.G.) for  $a = 10.2$   
 $0.8$  (21 S.W.G.) for  $a = 15.2$  and  $20.3$   
 $1.0$  (19 S.W.G.) for  $a = 25.4$

## Suppression versus frequency

Typical values



## Mechanical data

Dimensions:	see article table		
Vibration	IEC 68-2-6 Test Fc	3 directions at 2 hour each 10—500 Hz at 0.75 mm or 98 $\text{m/s}^2$	No visible damage No open or short circuit
Bump	IEC 68-2-29 Test Eb	4000 bumps at 390 $\text{m/s}^2$	No visible damage No open or short circuit
Solderability	IEC 68-2-20 Test Ta	Solder globule method	Wetting time for $\varnothing \leq 0.8 < 1$ s for $\varnothing > 0.8 < 1.5$ s
Humidity	IEC 68-2-3 Test Ca	±40°C and 90—95% R.H.	56 days