

# PME271Y

- EMI suppressor, class Y2, metallized paper
- 0.001 – 0.15  $\mu\text{F}$ , 250 VAC up to +100, 300 VAC up to +115 °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

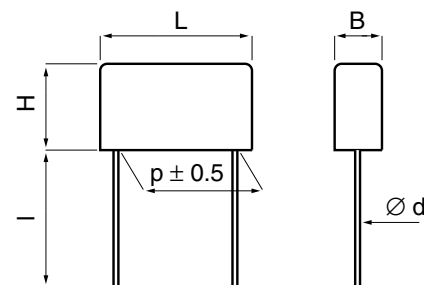
The capacitors are intended for use as interference suppressors in Y2 (line-to-earth) applications.

## CONSTRUCTION

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

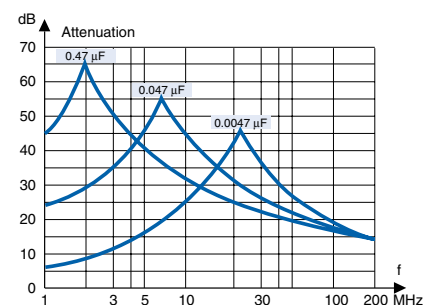
## TECHNICAL DATA

	PME271Y	PME271YA-E
<b>Rated voltage VAC, 50/60Hz</b>	250	300
<b>Capacitance range <math>\mu\text{F}</math></b>	0.001–0.1	0.001–0.15
<b>Temperature range °C</b>	–40/+100	–40/+115
<b>Climatic category IEC</b>	40/100/56/B	40/115/56/B
<b>Capacitance tolerance</b>	$\pm 10\%$ for $C > 0.1 \mu\text{F}$ , code K. $\pm 20\%$ for $C \leq 0.1 \mu\text{F}$ , code M	
<b>Approvals</b>	S, N, D, FI, VDE, SEV, IMQ, UL, CSA	
<b>Dissipation factor <math>\tan\delta</math></b>	$\leq 1.3\%$ at 1 kHz	
<b>Insulation resistance</b>	$C \leq 0.33 \mu\text{F}$ $\geq 12000 \text{ M}\Omega$ Measured at 500 VDC after 60 s, +23°C	
<b>In DC applications</b>	Recommended voltage: $\leq 1000 \text{ VDC}$	
<b>Resonance frequency</b>	Tabulated self-resonance frequencies $f_0$ refer to 5 mm lead lengths.	
<b>Test voltage between terminals</b>	The 100% screening factory test is carried out at 3000 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  $p = 25.4$

$I =$  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

<b>Vibration</b>	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
<b>Bump</b>	IEC 60068-2-29, Test Eb	4000 bumps at 390 m/s <sup>2</sup>	No visible damage, No open or short circuit
<b>Solderability</b>	IEC 60068-2-20, Test Ta	Solder globule method	Wetting time for $d \leq 0.8 < 1 \text{ s}$ for $d > 0.8 < 1.5 \text{ s}$
<b>Active flammability</b>	EN 132400		
<b>Passive flammability</b>	IEC 60384-14 (1993), EN 132400		
<b>Humidity</b>	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 reel				Weight g	f <sub>o</sub> MHz	Max dU/dt V/µs	Approvals								Article code
	B	H	L	p	R30 pcs	R06 pcs	taped pcs					ø	Z	Δ	FI	VDE	SEV	IMQ	UL	
<b>CLASS Y2 250 VAC +100 °C PME271 Y</b>																				
0.0010	3.9	7.5	13.5	10.2	1000	2000	700	0.7	53	2000	√	√	√	√	√	√	√	PME271Y410MR30		
0.0015	3.9	7.5	13.5	10.2	1000	2000	700	0.7	44	2000	√	√	√	√	√	√	√	PME271Y415MR30		
0.0022	3.9	7.5	13.5	10.2	1000	2000	700	0.7	37	2000	√	√	√	√	√	√	√	PME271Y422MR30		
0.0033	4.1	8.2	13.5	10.2	1000	2000	600	0.9	30	2000	√	√	√	√	√	√	√	PME271Y433MR30		
0.0047	5.1	10.5	13.5	10.2	800	1600	600	1.2	24	2000	√	√	√	√	√	√	√	PME271Y447MR30		
0.0068	5.2	10.5	18.5	15.2	500	1000	600	1.7	19	1400	√	√	√	√	√	√	√	PME271Y468MR30		
0.010	5.2	10.5	18.5	15.2	500	1000	600	1.7	16	1400	√	√	√	√	√	√	√	PME271Y510MR30		
0.015	5.5	11.0	18.5	15.2	500	1000	500	2.0	13	1400	√	√	√	√	√	√	√	PME271Y515MR30		
0.022	7.3	13.0	19.0	15.2	400	800	400	3.0	9.8	1400	√	√	√	√	√	√	√	PME271Y522MR30		
0.033	7.6	14.0	24.0	20.3	250	1500	250	4.0	7.0	1000	√	√	√	√	√	√	√	PME271Y533MR30		
0.047	9.0	15.0	24.0	20.3	200	1200	250	5.0	6.0	1000	√	√	√	√	√	√	√	PME271Y547MR30		
0.068	11.3	16.5	24.0	20.3	150	1000	180	7.0	4.6	600	√	√	√	√	√	√	√	PME271Y568MR30		
0.10	12.1	19.0	30.5	25.4	100	800		10.0	3.9	400	√	√	√	√	√	√	√	PME271Y610MR30		
<b>CLASS Y2 300 VAC + 115 °C PME271 Y</b>																				
0.0010	3.9	7.5	13.5	10.2	1000	2000	700	0.7	53	2000	√		√		√	√		PME271YA4100MR30		
0.0015	3.9	7.5	13.5	10.2	1000	2000	700	0.7	44	2000	√		√		√	√		PME271YA4150MR30		
0.0022	3.9	7.5	13.5	10.2	1000	2000	700	0.7	37	2000	√		√		√	√		PME271YA4220MR30		
0.0025	4.1	8.2	13.5	10.2	1000	2000	600	0.9	35	2000	√		√		√	√		PME271YA4250MR30		
0.0033	4.1	8.2	13.5	10.2	1000	2000	600	0.9	30	2000	√		√		√	√		PME271YA4330MR30		
0.0047	5.1	10.5	13.5	10.2	800	1600	600	1.2	24	2000	√		√		√	√		PME271YA4470MR30		
0.0068	5.2	10.5	18.5	15.2	500	1000	600	1.7	19	1400	√		√		√	√		PME271YB4680MR30		
0.010	5.2	10.5	18.5	15.2	500	1000	600	1.7	16	1400	√		√		√	√		PME271YB5100MR30		
0.015	5.5	11.0	18.5	15.2	500	1000	500	2.0	13	1400	√		√		√	√		PME271YB5150MR30		
0.022	7.3	13.0	18.5	15.2	400	800	400	3.0	9.8	1400	√		√		√	√		PME271YB5220MR30		
0.033	7.6	14.0	24.0	20.3	250	1500	250	4.0	7.0	1000	√		√		√	√		PME271YC5330MR30		
0.047	9.0	15.0	24.0	20.3	200	1200	250	5.0	6.0	1000	√		√		√	√		PME271YC5470MR30		
0.068	11.3	16.5	24.0	20.3	150	1000	180	7.0	4.6	1000	√		√		√	√		PME271YC5680MR30		
0.033	8.0	17.0	27.0	22.5	200	1200	250	5.5	6.8	600	√		√		√	√		PME271YD5330MR30		
0.047	8.0	17.0	27.0	22.5	200	1200	250	5.5	5.8	600	√		√		√	√		PME271YD5470MR30		
0.068	10.0	19.0	27.0	22.5	150	1000	200	7.5	4.8	600	√		√		√	√		PME271YD5680MR30		
0.10	12.0	22.0	27.0	22.5	100	800		10.0	3.8	600	√		√		√	√		PME271YD6100MR30		
0.10	12.1	19.0	30.5	25.4	100	800		10.0	3.9	400	√		√		√	√		PME271YE6100MR30		
0.15	15.3	22.0	30.5	25.4	75	600		15.0	3.1	400	√		√		√	√		PME271YE6150KR30		

## APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
S	EN 132400	9920003/01 (250 VAC), 9834228/01 (300 VAC)
N	EN 132400	P99101381 (250 VAC)
D	EN 132400	DK99-01992 (250 VAC)
FI	EN 132400	208122 (250 VAC)
VDE	EN 132400	121344 (250 VAC) 118222 (300 VAC)
SEV	EN 132400	99.7 70329.01 (250 VAC)
IMQ	EN 132400	V 4773 (250 VAC)
UL	UL 1283 ( $U_R = 250$ VAC)	E 100117 (250 VAC)
CSA	C 22.2 No. 8	53108 (250 VAC)

## MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- Y2
- 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.