

PME271Y

- EMI suppressor, class Y2, metallized paper
- 0.001 – 0.15 μF , 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

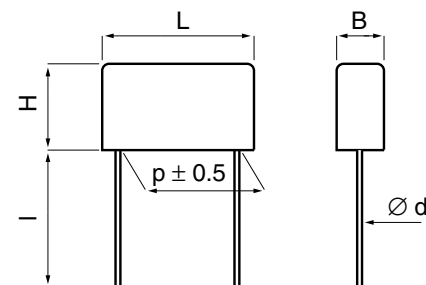
The capacitors are intended for use as interference suppressors in Y2 (line-to-earth) applications.

CONSTRUCTION

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

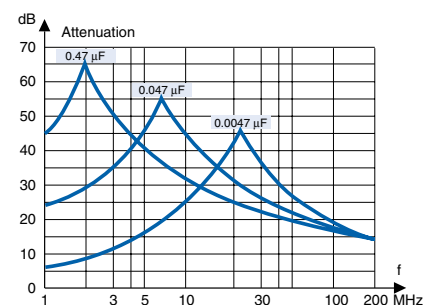
TECHNICAL DATA

| | PME271Y | PME271YA-E |
|---|--|-------------|
| Rated voltage VAC, 50/60Hz | 250 | 300 |
| Capacitance range μF | 0.001–0.1 | 0.001–0.15 |
| Temperature range °C | –40/+100 | –40/+115 |
| Climatic category IEC | 40/100/56/B | 40/115/56/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 | $C \leq 0.33 \mu\text{F}$ $\geq 12000 \text{ M}\Omega$ Measured at 500 VDC after 60 s, +23°C | |
| In DC applications | Recommended voltage: $\leq 1000 \text{ VDC}$ | |
| 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 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

| | | | |
|-----------------------------|--------------------------------|---|---|
| Vibration | IEC 60068-2-6, Test Fc | 3 directions at 2 hour each, 10 – 500 Hz at 0.75 mm or 98 m/s ² | No visible damage, No open or short circuit |
| Bump | IEC 60068-2-29, Test Eb | 4000 bumps at 390 m/s ² | 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 |

ARTICLE TABLE

| Capacitance µF | Max dimensions in mm | | | | Quantity per package reel | | | | Weight g | f _o 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 | |
| CLASS Y2 250 VAC +100 °C PME271 Y | | | | | | | | | | | | | | | | | | | | |
| 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 | | |
| CLASS Y2 300 VAC + 115 °C PME271 Y | | | | | | | | | | | | | | | | | | | | |
| 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.