

PME294



- EMI suppressor, class Y1, metallized paper
- Safety capacitor, ceramic replacement
- 470 – 4700 pF, 440 VAC, +115 °C, test voltage 4000 VAC 60 s

- Self-extinguishing encapsulation. The material is recognized according to UL 94 V-0.
- Very precise positioning of the leads in relation to the case giving efficient utilisation of PC board space.
- Excellent self-healing properties. Ensures long life even when subjected to frequent overvoltages.
- High dU/dt capability.
- Good resistance to ionisation due to impregnated dielectric.
- 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

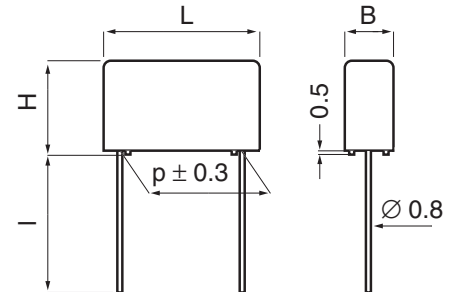
Safety capacitor for bridging of double or reinforced insulation applications requiring voltage test up to 4000 VAC 60 seconds. PME294 can be left in place during this test.

CONSTRUCTION

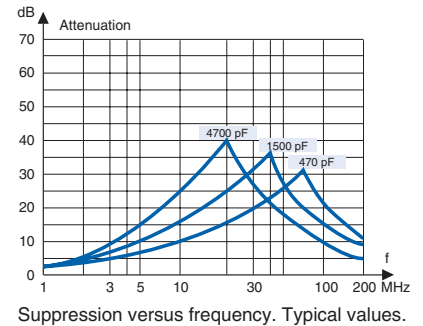
Multi-layer metallized paper. Encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0.

TECHNICAL DATA

| | |
|---------------------------------------|--|
| Rated voltage | 440 VAC 50/60 Hz |
| Capacitance range | 470 – 4700 pF |
| Capacitance tolerance | ± 20% |
| Temperature range | -40 to +115 °C |
| Climatic category IEC | 40/115/56/B |
| Approvals | S, N, D, FI, VDE, SEV, IMQ, UL, CSA |
| Dissipation factor tanδ | ≤ 1.3 % at 1 kHz |
| Insulation resistance | ≥ 12000 MΩ Measured at 500 VDC after 60 s, +23°C |
| Resonance frequency | Tabulated self-resonance frequencies f_0 refer to 5 mm lead length. |
| In DC applications | Recommended voltage: ≤ 1500 VDC |
| Test voltage between terminals | The 100% screening factory test is carried out at 4000 VAC, 50 Hz, 2 s. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test. |



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



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 < 1 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 pF | Max dimensions in mm | | | | Quantity per package | | | Weight g | f _o MHz | Max dU/dt V/μs | Article code |
|-------------------|-------------------------|------|------|------|----------------------|------------|----------------------|-------------|-----------------------|----------------------|------------------|
| | B | H | L | p | R30 pcs | R06 pcs | reel taped pcs | | | | |
| 470 | 5.5 | 12.0 | 18.0 | 15.0 | 500 | 1000 | 600 | 1.7 | 64 | 2000 | PME294RB3470MR30 |
| 560 | 5.5 | 12.0 | 18.0 | 15.0 | 500 | 1000 | 600 | 1.7 | 59 | 2000 | PME294RB3560MR30 |
| 680 | 5.5 | 12.0 | 18.0 | 15.0 | 500 | 1000 | 600 | 1.7 | 54 | 2000 | PME294RB3680MR30 |
| 820 | 5.5 | 12.5 | 18.0 | 15.0 | 500 | 1000 | 600 | 1.8 | 49 | 2000 | PME294RB3820MR30 |
| 1000 | 5.5 | 12.5 | 18.0 | 15.0 | 500 | 1000 | 600 | 1.8 | 46 | 2000 | PME294RB4100MR30 |
| 1200 | 5.5 | 14.0 | 18.0 | 15.0 | 500 | 1000 | 600 | 2.0 | 43 | 2000 | PME294RB4120MR30 |
| 1500 | 5.5 | 14.5 | 18.0 | 15.0 | 500 | 800 | 600 | 2.1 | 40 | 2000 | PME294RB4150MR30 |
| 1800 | 7.5 | 13.0 | 18.0 | 15.0 | 400 | 600 | 400 | 2.5 | 37 | 2000 | PME294RB4180MR30 |
| 2200 | 7.5 | 13.0 | 18.0 | 15.0 | 400 | 600 | 400 | 2.5 | 33 | 2000 | PME294RB4220MR30 |
| 2500 | 7.5 | 13.5 | 18.0 | 15.0 | 400 | 600 | 400 | 2.6 | 31 | 2000 | PME294RB4250MR30 |
| 2700 | 7.5 | 15.5 | 18.0 | 15.0 | 400 | 600 | 400 | 3.0 | 30 | 2000 | PME294RB4270MR30 |
| 3300 | 7.5 | 15.5 | 18.0 | 15.0 | 400 | 600 | 400 | 3.0 | 27 | 2000 | PME294RB4330MR30 |
| 3900 | 8.5 | 17.0 | 18.0 | 15.0 | 250 | 400 | 400 | 3.6 | 24 | 2000 | PME294RB4390MR30 |
| 4700 | 8.5 | 17.0 | 18.0 | 15.0 | 250 | 400 | 400 | 3.6 | 22 | 2000 | PME294RB4470MR30 |

APPROVALS/REFERENCE DOCUMENTS

| Certification Body | Specification | Approval reference |
|--------------------|---|--------------------|
| S | EN 132400 | 9902042/01 |
| N | EN 132400 | P99100386 |
| D | EN 132400 | DK99-00529 |
| FI | EN 132400 | 205353 |
| VDE | EN 132400 | 91852 |
| SEV | EN 132400 | 99.7 70114.01 |
| IMQ | EN 132400 | V4715 |
| UL | UL 1414 (U _R = 250 VAC) Double protection | E73869 |
| CSA | C22.2. No 1 | 53108 |
| | C22.2. No. 8 | 53108 |

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- Climatic category according to IEC 60068-1, appendix A
- Passive flammability class
- Approval marks
- Manufacturing code (year, month)

ORDERING INFORMATION

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