

PME285

- EMI suppressor, class X2, metallized paper
- 0.001 – 0.1 μF , 275 VAC, +110 °C

- The highest possible safety regarding active and passive flammability.
- Self-extinguishing encapsulation. The material is recognized according to UL 94 V-0.
- Very precise positioning of 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

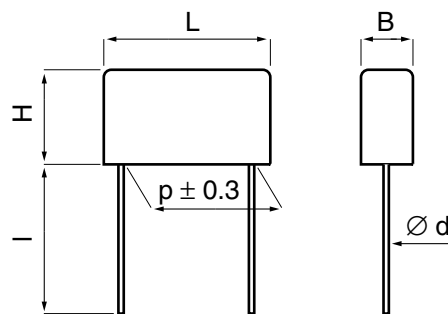
The capacitors are intended for use as interference suppressors in X2, across-the-line, antenna-coupling and line-by-pass.

CONSTRUCTION

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

TECHNICAL DATA

Rated voltage	275 VAC 50/60 Hz
Capacitance range	0.001 – 0.1 μF
Capacitance tolerance	$\pm 20\%$
Temperature range	-40 to +110°C
Climatic category IEC	40/110/56/B
Approvals	S, N, D, FI, VDE, SEV, IMQ, UL, CSA
Dissipation factor $\tan\delta$	$\leq 1.3\%$ at 1 kHz
Insulation resistance	$\geq 12000\text{ M}\Omega$ Measured at 500 VDC after 60 s, +23°C
Resonance frequency	Tabulated self-resonance frequencies f_0 refer to 5 mm lead lengths.
In DC applications	Recommended voltage: $\leq 630\text{ VDC}$
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.



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

$l =$ standard : $30 +5/-0\text{ mm}$
 option : short leads, tolerance $+0/-1\text{ mm}$
 (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 μF	Max dimensions in mm				Quantity per package				f _o MHz	Max dU/dt V/μs	Approvals								Article code	
					R30 pcs	R06 pcs	reel taped pcs	Weight g			S	Z	D	FI	VDE	SEV	IMQ	UL		CSA
	B	H	L	p																
0.0010	4.5	9.5	13.0	10.0	800	1600	700	0.9	55	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4100MR30
0.0015	4.5	9.5	13.0	10.0	800	1600	700	0.9	45	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4150MR30
0.0022	4.5	9.5	13.0	10.0	800	1600	700	0.9	38	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4220MR30
0.0033	4.5	9.5	13.0	10.0	800	1600	700	0.9	32	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4330MR30
0.0047	4.5	9.5	13.0	10.0	800	1600	700	0.9	27	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4470MR30
0.0068	4.5	10.5	13.0	10.0	800	1600	700	1.1	22	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MA4680MR30
0.010	5.5	10.5	18.0	15.0	500	1000	600	1.5	15	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5100MR30
0.015	5.5	11.5	18.0	15.0	500	1000	600	1.6	12	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5150MR30
0.022	5.5	11.5	18.0	15.0	500	1000	600	1.6	10	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5220MR30
0.033	5.5	13.0	18.0	15.0	500	1000	600	1.9	8.4	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5330MR30
0.047	7.5	12.5	18.0	15.0	400	800	400	2.3	6.5	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5470MR30
0.068	7.5	15.0	18.0	15.0	400	600	400	2.9	4.7	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB5680MR30
0.10	8.5	17.0	18.0	15.0	250	400	400	3.6	4.5	600	✓	✓	✓	✓	✓	✓	✓	✓	✓	PME285MB6100MR30

APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
S	EN 132400	9913230/01
N	EN 132400	P99100775
D	EN 132400	DK99-01442
FI	EN 132400	207513
VDE	EN 132400	121167
SEV	EN 132400	99.7 70302.01
IMQ	EN 132400	V 4756
UL	UL 1283 ($U_R=250$ VAC)	E 100117
	UL 1414 ($U_R=250$ VAC)	E 73869
CSA	C 22.2 No. 1	53108

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage
- X2
- SH, for self healing
- 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 21.

PACKING

Capacitors in standard design (lead length 30 mm) and with 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.

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.