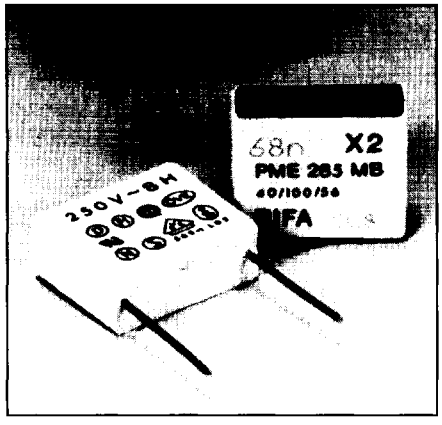
PME 285

- Self-extinguishing encapsulation. The epoxy resin and box material meets the requirements acc. to UL 94 V-0
- Very precise positioning of the leads in relation to the case giving efficient utilisation of PC-board space
- High dU/dt capability
- Excellent self-healing properties. Ensures long life even when subject to frequent transients
- Safety approvals in nine (9) countries
- 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

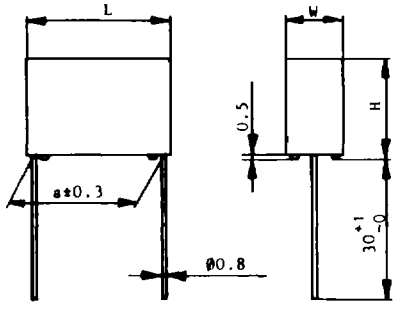


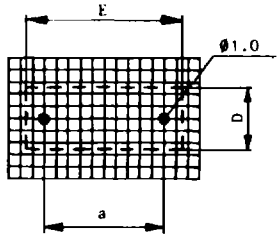
Application

The capacitors are intended for use as interference suppressors in X2 applications.

Basic design

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





Specification

Capacitance range	0.001—0.1µF
Rated voltage	275 VAC 50 Hz
Climatic category	IEC 40/100/56
Temperature range	—40 to +100°C
Capacitance tolerance	±20%
Approvals	SEMKO,NEMKO,DEMKO,EI,VDE,SEV,ÖVE,IMQ,UL

Technical data

Dissipation factor
≤1.3% at 1kHz

Insulation resistance
≥12000 MΩ. Measured at 500 VDC after 60 s, +23°C.

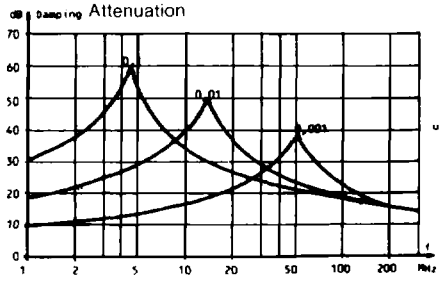
Resonance frequency
Tabulated self-resonance frequencies f_o refer to 5 mm length of leads.

In DC applications
Recommended voltage ≤630 VDC

Test voltage between terminals
The RIFA 100% screening factory test is carried out at 1700 VDC. The voltage level is selected to meet the approval requirements. All electrical characteristics are checked after the voltage tests.

Suppression v 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 98m/s²	No visible damage No open or short circuit
Bump	IEC 68-2-29 Test Eb	4000 bumps at 390m/s²	No visible damage No open or short circuit
Solderability	IEC 68-2-20 Test Ta	Solder globule method	Wetting time for ø ≤0.8<1 s
Fire hazard	IEC 695-2-2 UL 478 UL 1283	Application of test flame Acc. to section 34 in the Standard Acc. to section 18 in the standard	for a≧15 mm 120 s for a<15 mm 60 s
Humidity	IEC 68-2-3 Test Ca	+40°C and 90—95% R.H.	56 days

Article table

C_R	Max dimensions in mm				Max space requirements in mm		Quantity per package - reel			Weight	f_o	Max	Approvals									Article code
µF	L	W	H	a	D	E	R30 pcs	R06 pcs	taped pcs	g	MHz	dU/dt V/µs	S	N	D	FI	VDE	SEV	ÖVE	IMQ	UL	1st block
0.001	13.0	4.5	9.5	10.0	4.7	13.8	800	1600	700	0.9	55	1200	X	X	X	X	X	X	X	X	X	PME 285MA4100M
0.0015	13.0	4.5	9.5	10.0	4.7	13.8	800	1600	700	0.9	45	1200	X	X	X	X	X	X	X	X	X	PME 285MA4150M
0.0022	13.0	4.5	9.5	10.0	4.7	13.8	800	1600	700	0.9	35	1200	X	X	X	X	X	X	X	X	X	PME 285MA4220M
0.0033	13.0	4.5	9.5	10.0	4.7	13.8	800	1600	700	0.9	30	1200	X	X	X	X	X	X	X	X	X	PME 285MA4330M
0.0047	13.0	4.5	9.5	10.0	4.7	13.8	800	1600	700	0.9	25	1200	X	X	X	X	X	X	X	X	X	PME 285MA4470M
0.0068	13.0	4.5	10.5	10.0	4.7	13.8	800	1600	700	1.1	20	1200	X	X	X	X	X	X	X	X	X	PME 285MA4680M
0.01	18.0	5.5	10.5	15.0	5.7	18.8	500	1000	600	1.5	14	1200	X	X	X	X	X	X	X	X	X	PME 285MB5100M
0.015	18.0	5.5	11.5	15.0	5.7	18.8	500	1000	600	1.6	11	1200	X	X	X	X	X	X	X	X	X	PME 285MB5150M
0.022	18.0	5.5	11.5	15.0	5.7	18.8	500	1000	600	1.6	9.0	1200	X	X	X	X	X	X	X	X	X	PME 285MB5220M
0.033	18.0	5.5	13.0	15.0	5.7	18.8	500	1000	600	1.9	7.5	1200	X	X	X	X	X	X	X	X	X	PME 285MB5330M
0.047	18.0	7.5	12.5	15.0	7.7	18.8	400	800	400	2.3	6.5	1200	X	X	X	X	X	X	X	X	X	PME 285MB5470M
0.068	18.0	7.5	15.0	15.0	7.7	18.8	400	800	400	2.9	5.5	1200	X	X	X	X	X	X	X	X	X	PME 285MB5680M
0.1	18.0	8.5	17.0	15.0	8.7	18.8	250	500	400	3.6	4.5	600	X	X	X	X	X	X	X	X	X	PME 285MB6100M

Approvals/Ref. documents

Country	Specification	Approval reference
S = Sweden	SS 443 04 14	8708100
N = Norway	NEMKO 132./85	E 40668
D = Denmark	Stærkstr.regl. 1962/21	93665 EC
FI = Finland	E 384/14-82	120927-01
VDE = Germany	VDE 0565 Teil 1/12.79	35071
SEV = Switzerland	SEV 1055	86.5 50571.01 and 02
ÖVE = Austria	ÖVE-F22/1974	0683-026-01
IMQ = Italy	CEI 40-7/VI-1980	V 1306
UL = USA	UL 478 (U_R = 250 VAC)	E 100117
	UL 1283 (U_R = 250 VAC)	E 100117

Ordering information

Article code

1st block	**2nd block**
See "Article table"	The capacitor is also available with 5 or 6 mm lead length (add R05 or R06 in pos 14—16).
Pos. 13 Capacitance tolerance code: M = ±20 %	Tolerance $\pm^{0}_{1}$ mm. For taped add T0 in pos 14—15 (lead length 19 mm).
P M E 2 8 5 M B 5 2 2 0 M	**R 0 6**
1 2 3 4 5 6 7 8 9 10 11 12 13	14 15 16 17 18 19 20

Marking

- RIFA
- RIFA article code (8 pos.)
- Rated capacitance
- Rated voltage
- X2
- SH, for self-healing
- Climate category according to IEC 68-1, appendix A
- Approval marks
- Manufacturing code (factory, year, month)

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 230×155×72 mm. Quantity/package as per the article table.

Reels with taped capacitors are packed 10 in a box with dimension 570×380×380 mm.