

Features

- Very small size, achieved by our unique manufacturing method.
- Highly reliable because of its self-healing performance.
- Coated with flame retardant epoxy resin.

Specifications

Operating temp. range	-40 to +85C(105C) *1
Rated voltage	250, 400, 450 *2, 630V.DC
Capacitance range	250V.DC0.0010to10.0microF 400V.DC0.0010to4.7microF 450V.DC0.10to2.2microF 630V.DC0.0010to2.2microF
Cap. tolerance	+/-5%(J), +/-10%(K)
Tangent of loss angle	0.008 or less (at 1kHz)
Insulation resistance (at 100V.DC)	C=<0.33microF 15,000M-Ohm or more
	C>0.33microF 5,000OhmF or more
Voltage proof	Between terminals WV +/-1.5 1min or WV +/- 1.75 1 to 5sec

Endurance	85C WV +/-125% 1000Hr 450V. DC : 85C WV +/-111% 1000Hr	
	C/C	+/-10% within
	tan-del	0.011 or less
	IR	C =< 0.33 microF 2,700M-Ohm or more
C>0.33 microF 900 OhmF or more		
Damp Heat	40C 90 to 95%RH WV 500Hr	
	C/C	+/-10% within
	tan-del	0.011 or less
	IR	C=<0.33 microF 2,700M-Ohm or more
C>0.33 microF 900 OhmF or more		

*1 :() Marked temperature shows operatable range when voltage derated.

*2 : Recommendable for Active filtering Circuit.

Dimensions (mm)

Style	Straight lead type		Single formed lead type			
Cap range	250V.DC	102 to 106	250V.DC	394 to 106	250V.DC	102 to 106
	400V.DC	102 to 475	400V.DC	124 to 475	400V.DC	102 to 475
	450V.DC	104 to 225	450V.DC	124 to 225	450V.DC	104 to 225
	630V.DC	102 to 225	630V.DC	563 to 225	630V.DC	102 to 225

Dimensions (mm)

Capacitance		250V.DC						400V.DC					
microF	CODE	W	H	T	P	F	d	W	H	T	P	F	d
0.0010	102	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0012	122	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0015	152	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0018	182	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0022	222	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0027	272	7.3	6.5	3.7	5.0	5.0	0.6	9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0033	332	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0039	392	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0047	472	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0056	562	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.5	4.2	7.5	5.0/7.5	0.6
0.0068	682	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.5	4.4	7.5	5.0/7.5	0.6
0.0082	822	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.8	4.4	7.5	5.0/7.5	0.6
0.010	103	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.8	3.5	7.5	5.0/7.5	0.6
0.012	123	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.8	3.5	7.5	5.0/7.5	0.6
0.015	153	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.8	4.0	7.5	5.0/7.5	0.6
0.018	183	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.0	7.5	5.0/7.5	0.6
0.022	223	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.0	7.5	5.0/7.5	0.6
0.027	273	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.033	333	7.3	6.5	3.7	5.0	5.0	0.6	9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.039	393	7.3	6.8	4.0	5.0	5.0	0.6	9.8	7.0	4.2	7.5	5.0/7.5	0.6
0.047	473	7.3	7.0	"	5.0	5.0	0.6	9.8	7.2	4.2	7.5	5.0/7.5	0.6
0.056	563	7.3	7.2	4.3	5.0	5.0	0.6	9.8	8.0	4.2	7.5	5.0/7.5	0.6
0.068	683	7.3	7.5	4.6	5.0	5.0	0.6	9.8	8.3	4.4	7.5	5.0/7.5	0.6
0.082	823	7.3	8.0	5.0	5.0	5.0	0.6	9.8	8.6	4.8	7.5	5.0/7.5	0.6
0.10	104	7.3	8.5	5.5	5.0	5.0	0.6	9.8	10.8	4.5	7.5	5.0/7.5	0.6
0.12	124	7.3	10.2	5.0	5.0	5.0	0.6	12.5	10.5	4.2	10.0	5.0/7.5/10.0	0.6
0.15	154	7.3	11.5	6.0	5.0	5.0	0.6	12.5	10.7	4.6	10.0	5.0/7.5/10.0	0.6
0.18	184	9.8	11.0	4.6	7.5	5.0/7.5	0.6	12.5	10.0	5.5	10.0	5.0/7.5/10.0	0.6
0.22	224	9.8	11.3	5.0	7.5	5.0/7.5	0.6	12.5	10.5	5.8	10.0	5.0/7.5/10.0	0.6
0.27	274	9.8	12.0	5.5	7.5	5.0/7.5	0.6	12.5	13.5	5.2	10.0	5.0/7.5/10.0	0.6
0.33	334	9.8	12.5	6.0	7.5	5.0/7.5	0.6	12.5	14.3	5.8	10.0	5.0/7.5/10.0	0.6
0.39	394	12.5	14.0	4.3	10.0	5.0/7.5/10.0	0.6	12.5	14.5	6.3	10.0	5.0/7.5/10.0	0.6
0.47	474	12.5	14.4	4.8	10.0	5.0/7.5/10.0	0.6	12.5	15.5	7.0	10.0	5.0/7.5/10.0	0.6
0.56	564	12.5	14.8	5.2	10.0	5.0/7.5/10.0	0.6	17.8	14.3	6.0	15.0	5.0/7.5/15.0	0.6
0.68	684	12.5	15.2	5.8	10.0	5.0/7.5/10.0	0.6	17.8	14.8	6.5	15.0	5.0/7.5/15.0	0.8
0.82	824	15.0	15.4	5.5	12.5	7.5/10.0/12.5	0.6	17.8	15.5	7.0	15.0	5.0/7.5/15.0	0.8
1.0	105	15.0	16.0	6.2	12.5	7.5/10.0/12.5	0.6	17.8	16.3	7.5	15.0	5.0/7.5/15.0	0.8
1.2	125	15.0	16.5	6.8	12.5	7.5/10.0/12.5	0.6	17.8	17.0	8.5	15.0	5.0/7.5/15.0	0.8
1.5	155	15.0	17.5	7.8	12.5	7.5/10.0/12.5	0.6	25.5	16.0	7.8	22.5	17.5/22.5	0.8
1.8	185	20.3	16.8	6.6	17.5	7.5/10.0/12.5	0.8	25.5	17.0	8.3	22.5	17.5/22.5	0.8
2.2	225	20.3	17.8	7.3	17.5	7.5/10.0/12.5	0.8	25.5	18.8	8.8	22.5	17.5/22.5	0.8
2.7	275	20.3	18.6	8.3	17.5	7.5/10.0/12.5	0.8	25.5	19.8	10.0	22.5	17.5/22.5	0.8
3.3	335	20.3	21.0	9.0	17.5	7.5/10.0/12.5	0.8	25.5	21.0	11.0	22.5	17.5/22.5	0.8
3.9	395	20.3	21.8	9.8	17.5	7.5/10.0/12.5	0.8	25.5	22.0	12.0	22.5	17.5/22.5	0.8
4.7	475	20.3	23.8	10.7	17.5	7.5/10.0/12.5	0.8	25.5	23.6	12.5	22.5	17.5/22.5	0.8
5.6	565	25.5	22.3	10.8	22.5	17.5/22.5	0.8						
6.8	685	25.5	23.5	12.0	22.5	17.5/22.5	0.8						
8.2	825	25.5	25.0	13.3	22.5	17.5/22.5	0.8						
10.0	106	25.5	27.5	13.8	22.5	17.5/22.5	0.8						

Dimensions (mm)

Capacitance		450V.DC(for Active filtering Circuit)						630V.DC					
microF	CODE	W	H	T	P	F	d	W	H	T	P	F	d
0.0010	102							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0012	122							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0015	152							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0018	182							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0022	222							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0027	272							9.8	5.5	3.5	7.5	5.0/7.5	0.6
0.0033	332							9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0039	392							9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0047	472							9.8	6.0	4.2	7.5	5.0/7.5	0.6
0.0056	562							9.8	6.5	4.2	7.5	5.0/7.5	0.6
0.0068	682							9.8	6.5	4.4	7.5	5.0/7.5	0.6
0.0082	822							9.8	6.8	4.4	7.5	5.0/7.5	0.6
0.010	103							9.8	7.7	4.2	7.5	5.0/7.5	0.6
0.012	123							9.8	7.7	4.2	7.5	5.0/7.5	0.6
0.015	153							9.8	8.0	4.2	7.5	5.0/7.5	0.6
0.018	183							9.8	8.3	4.4	7.5	5.0/7.5	0.6
0.022	223							9.8	8.3	5.0	7.5	5.0/7.5	0.6
0.027	273							9.8	8.7	5.5	7.5	5.0/7.5	0.6
0.033	333							9.8	11.3	5.0	7.5	5.0/7.5	0.6
0.039	393							9.8	11.5	5.3	7.5	5.0/7.5	0.6
0.047	473							9.8	11.0	6.3	7.5	5.0/7.5	0.6
0.056	563							12.5	10.0	5.5	10.0	5.0/7.5/10.0	0.6
0.068	683							12.5	10.5	5.8	10.0	5.0/7.5/10.0	0.6
0.082	823							12.5	10.8	6.0	10.0	5.0/7.5/10.0	0.6
0.10	104	9.8	10.8	4.5	7.5	5.0/7.5	0.6	12.5	13.8	5.8	10.0	5.0/7.5/10.0	0.6
0.12	124	12.5	10.5	4.2	10.0	5.0/7.5/10.0	0.6	12.5	14.3	6.3	10.0	5.0/7.5/10.0	0.6
0.15	154	12.5	10.7	4.6	10.0	5.0/7.5/10.0	0.6	12.5	13.8	7.7	10.0	5.0/7.5/10.0	0.6
0.18	184	12.5	10.0	5.5	10.0	5.0/7.5/10.0	0.6	12.5	15.0	8.3	10.0	5.0/7.5/10.0	0.6
0.22	224	12.5	10.5	5.8	10.0	5.0/7.5/10.0	0.6	12.5	15.8	9.0	10.0	5.0/7.5/10.0	0.6
0.27	274	12.5	13.5	5.2	10.0	5.0/7.5/10.0	0.6	17.8	14.3	7.5	15.0	5.0/7.5/15.0	0.8
0.33	334	12.5	14.3	5.8	10.0	5.0/7.5/10.0	0.6	17.8	14.8	8.0	15.0	5.0/7.5/15.0	0.8
0.39	394	12.5	14.5	6.3	10.0	5.0/7.5/10.0	0.6	17.8	16.5	8.0	15.0	5.0/7.5/15.0	0.8
0.47	474	12.5	15.5	7.0	10.0	5.0/7.5/10.0	0.6	17.8	17.3	9.0	15.0	5.0/7.5/15.0	0.8
0.56	564	17.8	14.3	6.0	15.0	5.0/7.5/15.0	0.6	17.8	19.3	9.5	15.0	5.0/7.5/15.0	0.8
0.68	684	17.8	14.8	6.5	15.0	5.0/7.5/15.0	0.8	17.8	20.3	10.5	15.0	5.0/7.5/15.0	0.8
0.82	824	17.8	15.5	7.0	15.0	5.0/7.5/15.0	0.8	25.5	19.8	8.5	22.5	17.5/2.5	0.8
1.0	105	17.8	16.3	7.5	15.0	5.0/7.5/15.0	0.8	25.5	20.8	9.5	22.5	17.5/2.5	0.8
1.2	125	17.8	17.0	8.5	15.0	5.0/7.5/15.0	0.8	25.5	21.8	10.5	22.5	17.5/2.5	0.8
1.5	155	25.5	16.0	7.8	22.5	17.5/2.5	0.8	25.5	23.0	11.8	22.5	17.5/2.5	0.8
1.8	185	25.5	17.0	8.3	22.5	17.5/2.5	0.8	25.5	24.3	13.5	22.5	17.5/2.5	0.8
2.2	225	25.5	18.8	8.8	22.5	17.5/2.5	0.8	25.5	26.8	14.3	22.5	17.5/2.5	0.8

The description in this catalogue is as of March 2001 and is subject to change with or without prior notice for product improvement.