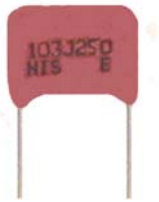
NISSEI

METALLIZED POLYESTER FILM CAPACITOR

Type **MMC**

Features

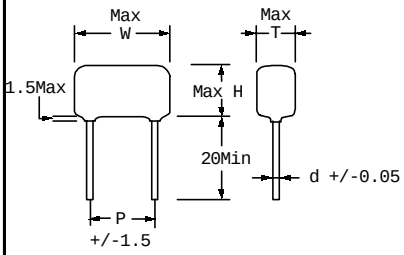
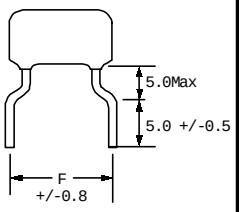
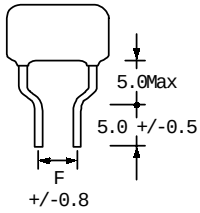


1) Smaller version of MMH type.
2) Very small size, achieved by our unique manufacturing method.
3) Height reliable because of its self-healing performance.
4) Uniform flame-retardant epoxy resin coating through the latest resin technology. This provides miniature size and light weight.

Specifications

Temp. Range	-40 to +85°C (+105°C)*	**Tangent of Loss Angle**	0.008 or less (at 1KHz)
Rated Voltage	250, 400, 450, 630, 1000, 1250 V.d.c.	**Insulation Resistance**	C <= 0.33μF 15,000MΩ or more C > 0.33μF 5,000ΩF or more
Capacitance	250V.d.c. 0.0010 to 10.0μF (E-12) 400V.d.c. 0.0010 to 4.7μF (E-12) 450V.d.c. 0.0010 to 3.3μF (E-12) 630V.d.c. 0.0010 to 2.2μF (E-12) 1000V.d.c. 0.0010 to 0.47μF (E-12) 1250V.d.c. 0.0010 to 0.22μF (E-12)	**Endurance**	85°C WV x 125%, 1000hr ΔC/C±5% within tanδ 0.01 or less IR C <= 0.33μF : 2,700MΩ or moreC > 0.33μF : 900MF or more
Cap. Tolerance	±5%(J) ±10%(K)	**Damp Heat**	40°C 90 to 95%RH WV 500hr ΔC/C±7%within tanδ 0.01 or less IR C <= 0.33μF : 2,700MΩ or moreC > 0.33μF : 900MF or more

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

Style		Straight Lead Type	Single Formed Lead Type	
				
Cap Range	250V.d.c.	102 to 106	102 to 106	184 to 155
	400V.d.c.	102 to 475	102 to 475	393 to 474
	450V.d.c.	102 to 335	102 to 335	393 to 474
	630V.d.c.	102 to 225	102 to 225	103 to 224
	1000V.d.c.	104 to 474	104 to 223	273 to 474
	1250V.d.c.	102 to 224	102 to 682	822 to 224

When using our capacitors, please consider the application notes and contact Nissei for any additional technical specifications relating to the limits of our performance characteristics.

Dimensions(mm)

MMC	Cap(μF)	MMC 250V.d.c.						MMC 400V.d.c.						MMC 450V.d.c.					
		W	H	T	P	F	φd	W	H	T	P	F	φd	W	H	T	P	F	φd
102	0.0010	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
122	0.0012	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
152	0.0015	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
182	0.0018	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
222	0.0022	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
272	0.0027	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
332	0.0033	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
392	0.0039	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
472	0.0047	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
562	0.0056	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
682	0.0068	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
822	0.0082	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6	10.3	7.0	4.0	7.5	5.0/7.5	0.6
103	0.010	10.3	7.4	4.3	7.5	5.0/7.5	0.6	10.3	7.6	4.4	7.5	5.0/7.5	0.6	10.3	7.6	4.4	7.5	5.0/7.5	0.6
123	0.012	10.3	7.4	4.4	7.5	5.0/7.5	0.6	10.3	7.8	4.4	7.5	5.0/7.5	0.6	10.3	7.8	4.4	7.5	5.0/7.5	0.6
153	0.015	10.3	7.5	4.4	7.5	5.0/7.5	0.6	10.3	7.8	4.4	7.5	5.0/7.5	0.6	10.3	7.8	4.4	7.5	5.0/7.5	0.6
183	0.018	10.3	7.5	4.4	7.5	5.0/7.5	0.6	10.3	7.6	4.4	7.5	5.0/7.5	0.6	10.3	7.6	4.4	7.5	5.0/7.5	0.6
223	0.022	10.3	7.5	4.4	7.5	5.0/7.5	0.6	10.3	7.9	4.5	7.5	5.0/7.5	0.6	10.3	7.9	4.5	7.5	5.0/7.5	0.6
273	0.027	10.3	7.5	4.4	7.5	5.0/7.5	0.6	10.3	8.2	4.8	7.5	5.0/7.5	0.6	10.3	8.2	4.8	7.5	5.0/7.5	0.6
333	0.033	10.3	7.5	4.4	7.5	5.0/7.5	0.6	10.3	9.0	5.5	7.5	5.0/7.5	0.6	10.3	9.0	5.5	7.5	5.0/7.5	0.6
393	0.039	10.3	7.5	4.5	7.5	5.0/7.5	0.6	12.5	8.0	4.9	10.0	5.0/7.5/10.0	0.6	12.5	8.0	4.9	10.0	5.0/7.5/10.0	0.6
473	0.047	10.3	7.9	4.4	7.5	5.0/7.5	0.6	12.5	8.3	5.2	10.0	5.0/7.5/10.0	0.6	12.5	8.3	5.2	10.0	5.0/7.5/10.0	0.6
563	0.056	10.3	7.9	4.8	7.5	5.0/7.5	0.6	12.5	10.0	5.2	10.0	5.0/7.5/10.0	0.6	12.5	10.0	5.2	10.0	5.0/7.5/10.0	0.6
683	0.068	10.3	7.5	4.5	7.5	5.0/7.5	0.6	12.5	10.5	5.5	10.0	5.0/7.5/10.0	0.6	12.5	10.5	5.5	10.0	5.0/7.5/10.0	0.6
823	0.082	10.3	8.0	4.8	7.5	5.0/7.5	0.6	12.5	11.0	6.0	10.0	5.0/7.5/10.0	0.6	12.5	11.0	6.0	10.0	5.0/7.5/10.0	0.6
104	0.10	10.3	8.4	5.8	7.5	5.0/7.5	0.6	12.5	12.0	6.0	10.0	5.0/7.5/10.0	0.6	12.5	12.0	6.0	10.0	5.0/7.5/10.0	0.6
124	0.12	10.3	9.0	6.0	7.5	5.0/7.5	0.6	18.0	10.2	5.5	15.0	5.0/7.5/15.0	0.6	18.0	10.2	5.5	15.0	5.0/7.5/10.0	0.6
154	0.15	10.3	10.8	6.0	7.5	5.0/7.5	0.6	18.0	12.0	5.5	15.0	5.0/7.5/15.0	0.6	18.0	12.0	5.5	15.0	5.0/7.5/10.0	0.6
184	0.18	12.5	10.0	5.0	10.0	5.0/7.5/10.0	0.6	18.0	12.5	6.0	15.0	5.0/7.5/15.0	0.6	18.0	12.5	6.0	15.0	5.0/7.5/10.0	0.6
224	0.22	12.5	10.3	5.5	10.0	5.0/7.5/10.0	0.6	18.0	13.0	6.5	15.0	5.0/7.5/15.0	0.6	18.0	13.0	6.5	15.0	5.0/7.5/10.0	0.6
274	0.27	12.5	11.0	6.0	10.0	5.0/7.5/10.0	0.6	18.0	13.5	7.0	15.0	5.0/7.5/15.0	0.8	18.0	13.5	7.0	15.0	5.0/7.5/10.0	0.8
334	0.33	12.5	11.5	6.5	10.0	5.0/7.5/10.0	0.6	18.0	14.0	7.7	15.0	5.0/7.5/15.0	0.8	18.0	14.0	7.7	15.0	5.0/7.5/10.0	0.8
394	0.39	18.0	12.0	4.9	15.0	5.0/7.5/15.0	0.6	18.0	15.0	8.5	15.0	5.0/7.5/15.0	0.8	18.0	15.0	8.5	15.0	5.0/7.5/10.0	0.8
474	0.47	18.0	12.5	5.3	15.0	5.0/7.5/15.0	0.6	18.0	16.5	8.5	15.0	5.0/7.5/15.0	0.8	18.0	16.5	8.5	15.0	5.0/7.5/10.0	0.8
564	0.56	18.0	13.0	5.5	15.0	5.0/7.5/15.0	0.6	25.0	15.3	7.5	22.5	22.5	0.8	25.0	15.3	7.5	22.5	22.5	0.8
684	0.68	18.0	13.5	6.0	15.0	5.0/7.5/15.0	0.8	25.0	16.0	8.2	22.5	22.5	0.8	25.0	16.0	8.2	22.5	22.5	0.8
824	0.82	18.0	14.5	6.5	15.0	5.0/7.5/15.0	0.8	25.0	16.8	9.0	22.5	22.5	0.8	25.0	16.8	9.0	22.5	22.5	0.8
105	1.0	18.0	15.0	7.4	15.0	5.0/7.5/15.0	0.8	25.0	17.7	10.0	22.5	22.5	0.8	25.0	17.7	10.0	22.5	22.5	0.8
125	1.2	18.0	15.9	8.0	15.0	5.0/7.5/15.0	0.8	25.0	18.8	11.0	22.5	22.5	0.8	25.0	18.8	11.0	22.5	22.5	0.8
155	1.5	18.0	16.8	9.0	15.0	7.5/15.0	0.8	30.0	19.5	10.0	27.5	27.5	0.8	30.0	19.5	10.0	27.5	27.5	0.8
185	1.8	25.0	15.5	7.5	22.5	22.5	0.8	30.0	18.7	9.3	27.5	27.5	0.8	30.0	21.5	11.0	27.5	27.5	0.8
225	2.2	25.0	16.3	8.5	22.5	22.5	0.8	30.0	19.8	10.4	27.5	27.5	0.8	30.0	23.0	12.5	27.5	27.5	0.8
275	2.7	25.0	17.1	9.4	22.5	22.5	0.8	30.0	21.0	11.6	27.5	27.5	0.8	30.0	25.0	14.0	27.5	27.5	0.8
335	3.3	25.0	18.0	10.3	22.5	22.5	0.8	30.0	22.3	13.0	27.5	27.5	0.8	30.0	26.5	15.5	27.5	27.5	0.8
395	3.9	25.0	20.5	11.0	22.5	22.5	0.8	30.0	23.6	14.2	27.5	27.5	0.8						
475	4.7	25.0	21.5	12.0	22.5	22.5	0.8	30.0	25.5	15.8	27.5	27.5	0.8						
565	5.6	30.0	21.0	11.8	27.5	27.5	0.8												
685	6.8	30.0	22.4	13.0	27.5	27.5	0.8												
825	8.2	30.0	23.5	14.3	27.5	27.5	0.8												
106	10.0	30.0	25.8	15.9	27.5	27.5	0.8												

MMC	Cap(μF)	MMC 630V.d.c.						MMC 1000V.d.c.						MMC 1250V.d.c.					
		W	H	T	P	F	φd	W	H	T	P	F	φd	W	H	T	P	F	φd
102	0.0010	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	10.0	0.6	15.5	11.0	6.0	12.5	10.0	0.6
122	0.0012	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	10.0	0.6	15.5	11.0	6.0	12.5	10.0	0.6
152	0.0015	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	10.0	0.6	15.5	11.0	6.0	12.5	10.0	0.6
182	0.0018	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	10.0	0.6	15.5	11.0	6.0	12.5	10.0	0.6
222	0.0022	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.5	6.0	12.5	10.0	0.6	15.5	11.5	6.0	12.5	10.0	0.6
272	0.0027	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	12.0	6.5	12.5	10.0	0.6	15.5	12.0	6.5	12.5	10.0	0.6
332	0.0033	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.5	6.0	12.5	10.0	0.6	15.5	11.5	6.0	12.5	10.0	0.6
392	0.0039	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	12.0	6.5	12.5	10.0	0.6	15.5	12.0	6.5	12.5	10.0	0.6
472	0.0047	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	12.5	7.0	12.5	10.0	0.6	15.5	12.5	7.0	12.5	10.0	0.6
562	0.0056	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	13.0	7.5	12.5	10.0	0.6	15.5	13.0	7.5	12.5	10.0	0.6
682	0.0068	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	10.0	0.6	15.5	15.0	7.5	12.5	10.0	0.6
822	0.0082	10.3	7.5	4.5	7.5	5.0/7.5	0.6	15.5	11.0	6.0	12.5	12.5	0.6	21.0	12.0	5.0	17.5	12.5	0.6
103	0.010	12.5	7.5	4.0	10.0	5.0/7.5/10.0	0.6	15.5	11.0	6.0	12.5	12.5	0.6	21.0	12.5	5.0	17.5	12.5	0.6
123	0.012	12.5	7.5	4.5	10.0	5.0/7.5/10.0	0.6	15.5	12.0	6.0	12.5	12.5	0.6	21.0	13.0	5.5	17.5	12.5	0.6
153	0.015	12.5	8.2	5.0	10.0	5.0/7.5/10.0	0.6	15.5	12.5	7.0	12.5	12.5	0.6	21.0	13.5	6.0	17.5	12.5	0.6
183	0.018	12.5	10.0	5.0	10.0	5.0/7.5/10.0	0.6	15.5	13.0	7.5	12.5	12.5	0.8	21.0	14.5	6.5	17.5	12.5	0.8
223	0.022	12.5	10.5	5.3	10.0	5.0/7.5/10.0	0.6	15.5	15.5	7.5	12.5	12.5	0.8	21.0	15.0	7.0	17.5	12.5	0.8
273	0.027	12.5	10.5	5.5	10.0	5.0/7.5/10.0	0.6	21.0	13.0	6.0	17.5	12.5	0.8	26.0	15.5	6.0	22.5	17.5	0.8
333	0.033	12.5	11.0	6.0	10.0	5.0/7.5/10.0	0.6	21.0	14.0	6.5	17.5	12.5	0.8	26.0	16.0	6.5	22.5	17.5	0.8
393	0.039	12.5	12.5	6.0	10.0	5.0/7.5/10.0	0.6	21.0	14.5	7.0	17.5	12.5	0.8	26.0	16.5	7.0	22.5	17.5	0.8
473	0.047	12.5	13.0	6.5	10.0	5.0/7.5/10.0	0.6	21.0	15.5	7.5	17.5	12.5	0.8	26.0	17.0	8.0	22.5	17.5	0.8
563	0.056	18.0	10.5	5.5	15.0	5.0/7.5/15.0	0.6	21.0	17.0	7.5	17.5	12.5	0.8	31.0	17.0	7.5	27.5	22.5	0.8
683	0.068	18.0	11.0	6.0	15.0	5.0/7.5/15.0	0.6	21.0	18.0	8.5	17.5	12.5	0.8	31.0	17.5	8.0	27.5	22.5	0.8
823	0.082	18.0	11.5	6.5	15.0	5.0/7.5/15.0	0.6	21.0	18.5	9.0	17.5	12.5	0.8	31.0	18.5	9.0	27.5	22.5	0.8
104	0.10	18.0	13.0	6.5	15.0	5.0/7.5/15.0	0.6	21.0	20.0	10.0	17.5	12.5	0.8	31.0	19.5	10.0	27.5	22.5	0.8
124	0.12	18.0	13.5	7.0	15.0	5.0/7.5/15.0	0.8	26.0	18.5	9.0	22.5	17.5	0.8	31.0	20.5	11.5	27.5	22.5	0.8
154	0.15	18.0	14.5	8.0	15.0	5.0/7.5/15.0	0.8	26.0	20.0	10.0	22.5	17.5	0.8	31.0	23.0	12.0	27.5	22.5	0.8
184	0.18	18.0	16.0	8.0	15.0	5.0/7.5/15.0	0.8	26.0	22.0	10.5	22.5	17.5	0.8	31.0	24.5	13.0	27.5	22.5	0.8
224	0.22	18.0	16.5	9.0	15.0	5.0/7.5/15.0	0.8	26.0	23.0	12.0	22.5	17.5	0.8	31.0	26.5	14.5	27.5	22.5	0.8
274	0.27	25.0	16.8	7.5	22.5	22.5	0.8	26.0	25.0	13.5	22.5	17.5	0.8						
334	0.33	25.0	17.5	8.0	22.5	22.5	0.8	31.0	24.0	13.0	27.5	22.5	0.8						
394	0.39	25.0	18.0	8.7	22.5	22.5	0.8	31.0	26.0	14.0	27.5	22.5	0.8						
474	0.47	25.0	19.0	9.5	22.5	22.5	0.8	31.0	27.5	15.5	27.5	22.5	0.8						
564	0.56	25.0	20.0	10.5	22.5	22.5	0.8												
684	0.68	25.0	21.5	11.5	22.5	22.5	0.8												
824	0.82	30.0	20.0	10.5	27.5	27.5	0.8												
105	1.0	30.0	21.0	11.5	27.5	27.5	0.8												
125	1.2	30.0	22.0	12.5	27.5	27.5	0.8												
155	1.5	30.0	24.0	14.3	27.5	27.5	0.8												
185	1.8	30.0	25.5	15.5	27.5	27.5	0.8												
225	2.2	30.0	27.3	17.5	27.5	27.5	0.8												

When using our capacitors, please consider the application notes and contact Nissei for any additional technical specifications relating to the limits of our performance characteristics.