

特徴/Features

- MMCタイプを更に、小型化した製品です。
- 自己回復作用があるため、信頼性に優れております。
- 外装は最新のエポキシ加工により難燃性のエポキシ樹脂による均一な厚さで覆われていますので小型軽量となっています。

- ★Smaller version of MMC type.
- ★Highly reliable because of its self-healing performance.
- ★Uniform flame-retardant epoxy resin coating through the latest resin technology. This provides miniature size and light weight.

規格/Specifications

使用温度範囲 Temp. range	-40~+85°C (+105°C) <sup>※1</sup>	絶縁抵抗 Insulation resistance	C ≤ 0.33 μF 15,000MΩ <sub>100%</sub> <sup>※2</sup> C > 0.33 μF 5,000Ω F <sub>100%</sub> <sup>※2</sup>
定格電圧 Rated voltage	250V, 400V, 450V <sup>※2</sup> , 630Vdc	高温負荷 Endurance	85°C、WV×125% 1000hr印加 <sup>※3</sup> ΔC/C ±10% <sub>100%</sub> <sup>in</sup> tanδ 0.011 <sub>100%</sub> <sup>↓ess</sup> IR C ≤ 0.33 μF 2,700MΩ <sub>100%</sub> <sup>※2</sup> C > 0.33 μF 900Ω F <sub>100%</sub> <sup>※2</sup>
静電容量範囲 Capacitance	250Vdc 0.0010~10 μF (E-12), 450Vdc 0.10~2.2 μF (E-12) 400Vdc 0.0010~4.7 μF (E-12), 630Vdc 0.0010~2.2 μF (E-12)	耐湿負荷 Damp heat	40°C、90~95%RH、WV 500hr印加 ΔC/C ±10% <sub>100%</sub> <sup>in</sup> tanδ 0.011 <sub>100%</sub> <sup>↓ess</sup> IR C ≤ 0.33 μF 2,700MΩ <sub>100%</sub> <sup>※2</sup> C > 0.33 μF 900Ω F <sub>100%</sub> <sup>※2</sup>
静電容量許容差 Cap. tolerance	±5% (J), ±10% (K)		
誘電正接 Tangent of loss angle	0.008 <sub>100%</sub> <sup>↓ess</sup> (at 1kHz)		

※1 ( ) 温度は電圧軽減による使用可能範囲です。

※2 450Vdcはアクティブフィルタ専用

※3 450Vdcは85°C WV×111% 1000Hr印加

※1 ( ) Marked temperature shows operatable when voltage is derated.

※2 450Vdc:Recommendable for Active filtering circuit.

※3 450Vdc:85°C WV×111% 1000hr applied.

寸法/Dimensions (mm)

Cap CODE	Cap (μF)	基準収納数 NUMBER OF PIECES FOR PACKING UNIT										基準収納数 NUMBER OF PIECES FOR PACKING UNIT													
		MMX 250Vdc					MMX 400Vdc					MMX 250Vdc					MMX 400Vdc								
		W	H	T	P	F	φd	テーピング Taping	ロング Long	フォーミング Formed	テーピング Taping	ロング Long	フォーミング Formed	W	H	T	P	F	φd	Ammo	Bag	Box	Bag	Box	Bag
102	0.0010	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
122	0.0012	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
152	0.0015	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
182	0.0018	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
222	0.0022	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
272	0.0027	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
332	0.0033	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
392	0.0039	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
472	0.0047	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
562	0.0056	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.5	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
682	0.0068	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.5	4.4	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
822	0.0082	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.4	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
103	0.010	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
123	0.012	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	200	2,000
153	0.015	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.0	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
183	0.018	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.0	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
223	0.022	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.0	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
273	0.027	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
333	0.033	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000	9.8	6.8	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	200	2,000
393	0.039	7.3	6.8	4.0	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	7.0	4.2	7.5	5.0/7.5	0.6	1,000	200	1,600	200	1,600	200	1,600
473	0.047	7.3	7.0	4.0	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	7.2	4.2	7.5	5.0/7.5	0.6	1,000	200	1,600	200	1,600	200	1,600
563	0.056	7.3	7.2	4.3	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	8.0	4.2	7.5	5.0/7.5	0.6	1,000	200	1,600	200	1,600	200	1,600
683	0.068	7.3	7.5	4.6	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	8.3	4.4	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	100	1,500
823	0.082	7.3	8.0	5.0	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	8.6	4.8	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	100	1,500
104	0.10	7.3	8.5	5.5	5.0	5.0	0.6	1,000	200	2,000	200	2,000	9.8	10.8	4.5	7.5	5.0/7.5	0.6	1,000	100	1,000	100	1,000	100	1,000
124	0.12	7.3	10.2	5.0	5.0	5.0	0.6	1,000	200	2,000	200	2,000	12.5	10.5	4.2	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	100	1,000
154	0.15	7.3	11.5	6.0	5.0	5.0	0.6	1,000	200	2,000	200	2,000	12.5	10.7	4.6	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	100	1,000
184	0.18	9.8	11.0	4.6	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	12.5	10.0	5.5	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	100	1,000
224	0.22	9.8	11.3	5.0	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	12.5	10.5	5.8	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	100	1,000
274	0.27	9.8	12.0	5.5	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	12.5	13.5	5.2	10.0	5.0/7.5	0.6	1,000	100	500	100	500	100	500
334	0.33	9.8	12.5	6.0	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	12.5	14.3	5.8	10.0	5.0/7.5	0.6	1,000	100	500	100	500	100	500
394	0.39	12.5	14.0	4.3	10.0	5.0/7.5/10.0	0.6	1,000	100	1,000	100	1,000	12.5	14.5	6.3	10.0	5.0/7.5	0.6	500	50	500	50	500	50	500
474	0.47	12.5	14.4	4.8	10.0	5.0/7.5/10.0	0.6	1,000	100	1,000	100	1,000	12.5	15.5	7.0	10.0	5.0/7.5	0.6	500	50	500	50	500	50	500
564	0.56	12.5	14.8	5.2	10.0	5.0/7.5/10.0	0.6	1,000	100	500	100	500	17.8	14.3	6.0	15.0	5.0/7.5/15.0	0.6	500	50	500	50	500	50	500
684	0.68	12.5	15.2	5.8	10.0	5.0/7.5/10.0	0.6	1,000	100	500	100	500	17.8	14.8	6.5	15.0	5.0/7.5/15.0	0.8	400	50	500	50	500	50	500
824	0.82	15.0	15.4	5.5	12.5	7.5/10.0/12.5	0.6	500	100	500	100	500	17.8	15.5	7.0	15.0	5.0/7.5/15.0	0.8	400	50	500	50	500	50	500
105	1.0	15.0	16.0	6.2	12.5	7.5/10.0/12.5	0.6	400	100	500	100	500	17.8	16.3	7.5	15.0	5.0/7.5/15.0	0.8	400	50	400	50	400	50	400
125	1.2	15.0	16.5	6.8	12.5	7.5/10.0/12.5	0.6	400	100	500	100	500	17.8	17.0	8.5	15.0	5.0/7.5/15.0	0.8	300	50	400	50	400	50	400
155	1.5	15.0	17.5	7.8	12.5	7.5/10.0/12.5	0.6	400	100	500	100	500	25.5	16.0	7.8	22.5	17.5/22.5	0.8		50	200	50	200	50	200
185	1.8	20.3	16.8	6.6	17.5	7.5/10.0/12.5	0.8	400	50	250	50	250	25.5	17.0	8.3	22.5	17.5/22.5	0.8		50	200	50	200	50	200
225	2.2	20.3	17.8	7.3	17.5	7.5/10.0/12.5	0.8	400	50	250	50	250	25.5	18.8	8.8	22.5	17.5/22.5	0.8		50	200	50	200	50	200
275	2.7	20.3	18.6	8.3	17.5	7.5/10.0/12.5	0.8	300	50	200	50	200	25.5	19.8	10.0	22.5	17.5/22.5	0.8		20	100	20	100	20	100
335	3.3	20.3	21.0	9.0	17.5	7.5/10.0/12.5	0.8	300	50	200	50	200	25.5	21.0	11.0	22.5	17.5/22.5	0.8		20	100	20	100	20	100
395	3.9	20.3	21.8	9.8	17.5	7.5/10.0/12.5	0.8	300	50	200	50	200	25.5	22.0	12.0	22.5	17.5/22.5	0.8		20	100	20	100	20	100
475	4.7	20.3	23.8	10.7	17.5	7.5/10.0/12.5	0.8		50	200	50</														

## 寸法 / Dimensions (mm)

Cap CODE	Cap (μF)	MMX 450Vdc							基準収納数 NUMBER OF PIECES FOR PACKING UNIT				
		W	H	T	P	F	φ d	テーピング	ロング		フォーミング		
								Taping	Bag	Box	Bag	Box	
104	0.10	9.8	10.8	4.5	7.5	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
124	0.12	12.5	10.5	4.2	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
154	0.15	12.5	10.7	4.6	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
184	0.18	12.5	10.0	5.5	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
224	0.22	12.5	10.5	5.8	10.0	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
274	0.27	12.5	13.5	5.2	10.0	5.0/7.5	0.6	1,000	100	500	100	500	
334	0.33	12.5	14.3	5.8	10.0	5.0/7.5	0.6	1,000	100	500	100	500	
394	0.39	12.5	14.5	6.3	10.0	5.0/7.5	0.6	500	50	500	50	500	
474	0.47	12.5	15.5	7.0	10.0	5.0/7.5	0.6	500	50	500	50	500	
564	0.56	17.8	14.3	6.0	15.0	5.0/7.5/15.0	0.6	500	50	500	50	500	
684	0.68	17.8	14.8	6.5	15.0	5.0/7.5/15.0	0.8	400	50	500	50	500	
824	0.82	17.8	15.5	7.0	15.0	5.0/7.5/15.0	0.8	400	50	500	50	500	
105	1.0	17.8	16.3	7.5	15.0	5.0/7.5/15.0	0.8	400	50	400	50	400	
125	1.2	17.8	17.0	8.5	15.0	5.0/7.5/15.0	0.8	300	50	400	50	400	
155	1.5	25.5	16.0	7.8	22.5	17.5/22.5	0.8		50	200	50	200	
185	1.8	25.5	17.0	8.3	22.5	17.5/22.5	0.8		50	200	50	200	
225	2.2	25.5	18.8	8.8	22.5	17.5/22.5	0.8		50	200	50	200	
275	2.7	25.5	19.8	10.0	22.5	17.5/22.5	0.8		20	100	20	100	
335	3.3	25.5	21.0	11.0	22.5	17.5/22.5	0.8		20	100	20	100	
395	3.9	25.5	22.0	12.0	22.5	17.5/22.5	0.8		20	100	20	100	
475	4.7	25.5	23.6	12.5	22.5	17.5/22.5	0.8		20	100	20	100	

Cap CODE	Cap (μF)	MMX 630Vdc							基準収納数 NUMBER OF PIECES FOR PACKING UNIT				
		W	H	T	P	F	φ d	テーピング	ロング		フォーミング		
								Taping	Bag	Box	Bag	Box	
102	0.0010	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
122	0.0012	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
152	0.0015	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
182	0.0018	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
222	0.0022	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
272	0.0027	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000	
332	0.0033	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
392	0.0039	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
472	0.0047	9.8	6.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
562	0.0056	9.8	6.5	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
682	0.0068	9.8	6.5	4.4	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
822	0.0082	9.8	6.8	4.4	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
103	0.010	9.8	7.7	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
123	0.012	9.8	7.7	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
153	0.015	9.8	8.0	4.2	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
183	0.018	9.8	8.3	4.4	7.5	5.0/7.5	0.6	1,000	200	2,000	200	2,000	
223	0.022	9.8	8.3	5.0	7.5	5.0/7.5	0.6	1,000	200	1,600	200	1,600	
273	0.027	9.8	8.7	5.5	7.5	5.0/7.5	0.6	1,000	200	1,600	200	1,600	
333	0.033	9.8	11.3	5.0	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	
393	0.039	9.8	11.5	5.3	7.5	5.0/7.5	0.6	1,000	100	1,500	100	1,500	
473	0.047	9.8	11.0	6.3	7.5	5.0/7.5	0.6	1,000	100	1,000	100	1,000	
563	0.056	12.5	10.0	5.5	10.0	5.0/7.5/10.0	0.6	1,000	100	1,000	100	1,000	
683	0.068	12.5	10.5	5.8	10.0	5.0/7.5/10.0	0.6	1,000	100	1,000	100	1,000	
823	0.082	12.5	10.8	6.0	10.0	5.0/7.5/10.0	0.6	1,000	100	1,000	100	1,000	
104	0.10	12.5	13.8	5.8	10.0	5.0/7.5/10.0	0.6	1,000	100	500	100	500	
124	0.12	12.5	14.3	6.3	10.0	5.0/7.5/10.0	0.6	1,000	50	500	50	500	
154	0.15	12.5	13.8	7.7	10.0	5.0/7.5/10.0	0.6	500	50	500	50	500	
184	0.18	12.5	15.0	8.3	10.0	5.0/7.5/10.0	0.6	500	50	500	50	500	
224	0.22	12.5	15.8	9.0	10.0	5.0/7.5/10.0	0.6	500	50	500	50	500	
274	0.27	17.8	14.3	7.5	15.0	5.0/7.5/15.0	0.8	400	50	400	50	400	
334	0.33	17.8	14.8	8.0	15.0	5.0/7.5/15.0	0.8	300	50	400	50	400	
394	0.39	17.8	16.5	8.0	15.0	5.0/7.5/15.0	0.8	300	50	400	50	400	
474	0.47	17.8	17.3	9.0	15.0	5.0/7.5/15.0	0.8	300	50	400	50	400	
564	0.56	17.8	19.3	9.5	15.0	5.0/7.5/15.0	0.8	300	50	200	50	200	
684	0.68	17.8	20.3	10.5	15.0	5.0/7.5/15.0	0.8		50	200	50	200	
824	0.82	25.5	19.8	8.5	22.5	17.5/22.5	0.8		20	100	20	100	
105	1.0	25.5	20.8	9.5	22.5	17.5/22.5	0.8		20	100	20	100	
125	1.2	25.5	21.8	10.5	22.5	17.5/22.5	0.8		20	100	20	100	
155	1.5	25.5	23.0	11.8	22.5	17.5/22.5	0.8		20	100	20	100	
185	1.8	25.5	24.3	13.5	22.5	17.5/22.5	0.8		20	100	20	100	
225	2.2	25.5	26.8	14.3	22.5	17.5/22.5	0.8		20	100	20	100	

形状 Style	ストレートリード Straight lead type		フォーミング Forming lead type		
	W <sub>Max</sub>	T <sub>Max</sub>	F=5.0	102~106	394~684
Cap範囲 Cap range	250Vdc	102~106	F=7.5	184~684	824~475
			F=10.0	394~155	185~475
			F=12.5	824~155	185~475
			F=17.5		565~106
			F=22.5		565~106
	400Vdc	102~475	F=5.0	102~104	124~125
			F=7.5	102~474	564~125
			F=10.0	124~474	
			F=15.0	564~125	
			F=17.5		155~475
450Vdc	104~225	F=5.0	104	124~125	
		F=7.5	104~474	564~125	
		F=10.0	124~474		
		F=15.0	564~125		
		F=17.5		155~225	
630Vdc	102~225	F=5.0	102~473	563~684	
		F=7.5	102~224	274~684	
		F=10.0	563~224		
		F=15.0	274~684		
		F=17.5		824~225	

周波数に対する許容電流特性 / Characteristics of permissible current to frequency

