

## 金属化聚酯薄膜电容器（部分为安全膜） Metallized polyester film capacitor (Part is Safety film )

### 特点 / Features

- ◆ 比MMC系列产品更加小型化。 ★ Smaller version of MMC type.
- ◆ 自愈性能优越，可靠性高。 ★ Highly reliable because of its self-healing performance.
- ◆ 阻燃性环氧粉末包封，体积小，重量轻。 ★ Flame retardant epoxy resin coating. small size, and light weight.

### 规格 / Specifications

使用温度范围	Temp. Range	- 40~+85℃(+105℃) ※1
额定电压	Rated Voltage	250V, 400V, 450V ※2, 630V.dc
容量范围	Capacitance Range	250V.dc 0.0010~10μF(E-12), 400V.dc 0.0010~4.7μF(E-12) 450V.dc 0.10~2.2μF(E-12), 630V.dc 0.0010~2.2μF(E-12)
容量偏差	Capacitance Tolerance	±5% (J), ±10% (K),
损耗角正切	Dissipation Factor	0.008以下/or less(at 1kHz)
绝缘电阻	Insulation Resistance	C≦0.33μF 15,000MΩ以上/or more C>0.33μF 5,000ΩF以上/or more
高温负荷	Endurance	85℃、施加 WV×125% 1000Hr ※3 ΔC/C ±10% 以内/with in tanδ 0.011以下/or less IR C≦0.33μF 2,700MΩ以上/or more C>0.33μF 900ΩF以上/or more
耐湿负荷	Damp heat	40℃、90~95%RH 施加 WV 500Hr ΔC/C ±10% 以内/with in tanδ 0.011以下/or less IR C≦0.33μF 2,700MΩ以上/or more C>0.33μF 900ΩF以上/or more

※1 ( )里的温度表示电压降低时使用温度的范围。

※2 450V. dc 为有源滤波器专用。

※3 450V. dc 为 85℃ WV×111% 1000Hr 施加。

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

※2 Recommendable for Active filtering circuit.

※3 450V.dc : 85℃ WV×111% 1000Hr applied.

引线尺寸 / Lead dimension(mm)

形状 Style	直引线型 Straight lead type		引线弯曲型 Forming lead type		
Cap 范围 Cap range	250V. DC	102~106	F= 5.0	102~334	394~684
			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	
	400V. DC	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
			F=22.5	155~475	
	450V. DC	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
			F=22.5	155~225	
	630V. DC	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	
F=22.5			824~225		

编带仕样的引线尺寸 (F) , 请参照第27~29页的编带尺寸表。

For a pitch space(F) of the taping specification, refer to "Taping dimensions "on page 27 ~ 29.

## 外形尺寸/ Dimension(mm)

Cap CODE	Cap (μF)	MMX 250V. DC						标准包装数 Number of pieces for packing unit				
								W	H	T	P	F
		Ammo	Bag	Box	Bag	Box						
102	0.0010	7.3	6.5	3.7	5.0	5.0	0.6	2,000	200	2,000	200	2,000
122	0.0012	"	"	"	"	"	"	"	"	"	"	"
152	0.0015	"	"	"	"	"	"	"	"	"	"	"
182	0.0018	"	"	"	"	"	"	"	"	"	"	"
222	0.0022	"	"	"	"	"	"	"	"	"	"	"
272	0.0027	"	"	"	"	"	"	"	"	"	"	"
332	0.0033	"	"	"	"	"	"	"	"	"	"	"
392	0.0039	"	"	"	"	"	"	"	"	"	"	"
472	0.0047	"	"	"	"	"	"	"	"	"	"	"
562	0.0056	"	"	"	"	"	"	"	"	"	"	"
682	0.0068	"	"	"	"	"	"	"	"	"	"	"
822	0.0082	"	"	"	"	"	"	"	"	"	"	"
103	0.010	"	"	"	"	"	"	"	"	"	"	"
123	0.012	"	"	"	"	"	"	"	"	"	"	"
153	0.015	"	"	"	"	"	"	"	"	"	"	"
183	0.018	"	"	"	"	"	"	"	"	"	"	"
223	0.022	"	"	"	"	"	"	"	"	"	"	"
273	0.027	"	"	"	"	"	"	"	"	"	"	"
333	0.033	"	"	"	"	"	"	"	"	"	"	"
393	0.039	"	6.8	4.0	"	"	"	1,000	"	"	"	"
473	0.047	"	7.0	"	"	"	"	"	"	"	"	"
563	0.056	"	7.2	4.3	"	"	"	"	"	"	"	"
683	0.068	"	7.5	4.6	"	"	"	"	"	"	"	"
823	0.082	"	8.0	5.0	"	"	"	"	"	"	"	"
104	0.10	"	8.5	5.5	"	"	"	"	"	"	"	"
124	0.12	"	10.2	5.0	"	"	"	"	"	"	"	"
154	0.15	"	11.5	6.0	"	"	"	"	"	"	"	"
184	0.18	9.8	11.0	4.6	7.5	5.0/7.5	"	"	100	1,500	100	1,500
224	0.22	"	11.3	5.0	"	"	"	"	"	"	"	"
274	0.27	"	12.0	5.5	"	"	"	"	"	"	"	"
334	0.33	"	12.5	6.0	"	"	"	"	"	"	"	"
394	0.39	12.5	14.0	4.3	10.0	5.0/7.5/10.0	"	"	"	1,000	"	1,000
474	0.47	"	14.4	4.8	"	"	"	"	"	"	"	"
564	0.56	"	14.8	5.2	"	"	"	"	"	500	"	500
684	0.68	"	15.2	5.8	"	"	"	"	"	"	"	"
824	0.82	15.0	15.4	5.5	12.5	7.5/10.0/12.5	"	500	"	"	"	"
105	1.0	"	16.0	6.2	"	"	"	400	"	"	"	"
125	1.2	"	16.5	6.8	"	"	"	"	"	"	"	"
155	1.5	"	17.5	7.8	"	"	"	"	"	"	"	"
185	1.8	20.3	16.8	6.6	17.5	"	0.8	"	50	250	50	250
225	2.2	"	17.8	7.3	"	"	"	"	"	"	"	"
275	2.7	"	18.6	8.3	"	"	"	300	"	200	"	200
335	3.3	"	21.0	9.0	"	"	"	"	"	"	"	"
395	3.9	"	21.8	9.8	"	"	"	"	"	"	"	"
475	4.7	"	23.8	10.7	"	"	"	"	"	"	"	"
565	5.6	25.5	22.3	10.8	22.5	17.5/22.5	"	"	20	100	20	100
685	6.8	"	23.5	12.0	"	"	"	"	"	"	"	"
825	8.2	"	25.0	13.3	"	"	"	"	"	"	"	"
106	10.0	"	27.5	13.8	"	"	"	"	"	"	"	"

## 外形尺寸/ Dimension(mm)

Cap CODE	Cap (μF)	MMX 400V. DC						标准包装数 Number of pieces for packing unit				
								编带 Taping		直脚品 Long		引线弯曲型 Formed
		W	H	T	P	F	Φd	Ammo	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	"	"	"	"	"	"	"	"	"	"	"
152	0.0015	"	"	"	"	"	"	"	"	"	"	"
182	0.0018	"	"	"	"	"	"	"	"	"	"	"
222	0.0022	"	"	"	"	"	"	"	"	"	"	"
272	0.0027	"	"	"	"	"	"	"	"	"	"	"
332	0.0033	"	6.0	4.2	"	"	"	1,000	"	"	"	"
392	0.0039	"	"	"	"	"	"	"	"	"	"	"
472	0.0047	"	"	"	"	"	"	"	"	"	"	"
562	0.0056	"	6.5	"	"	"	"	"	"	"	"	"
682	0.0068	"	"	4.4	"	"	"	"	"	"	"	"
822	0.0082	"	6.8	"	"	"	"	"	"	"	"	"
103	0.010	"	"	3.5	"	"	"	2,000	"	"	"	"
123	0.012	"	"	"	"	"	"	"	"	"	"	"
153	0.015	"	"	4.0	"	"	"	1,000	"	"	"	"
183	0.018	"	"	"	"	"	"	"	"	"	"	"
223	0.022	"	"	"	"	"	"	"	"	"	"	"
273	0.027	"	"	4.2	"	"	"	"	"	"	"	"
333	0.033	"	"	"	"	"	"	"	"	"	"	"
393	0.039	"	7.0	"	"	"	"	"	"	1,600	"	1,600
473	0.047	"	7.2	"	"	"	"	"	"	"	"	"
563	0.056	"	8.0	"	"	"	"	"	"	"	"	"
683	0.068	"	8.3	4.4	"	"	"	"	100	1,500	100	1,500
823	0.082	"	8.6	4.8	"	"	"	"	"	"	"	"
104	0.10	"	10.8	4.5	"	"	"	"	"	1,000	"	1,000
124	0.12	12.5	10.5	4.2	10.0	"	"	"	"	"	"	"
154	0.15	"	10.7	4.6	"	"	"	"	"	"	"	"
184	0.18	"	10.0	5.5	"	"	"	"	"	"	"	"
224	0.22	"	10.5	5.8	"	"	"	"	"	"	"	"
274	0.27	"	13.5	5.2	"	"	"	"	"	500	"	500
334	0.33	"	14.3	5.8	"	"	"	"	"	"	"	"
394	0.39	"	14.5	6.3	"	"	"	500	50	"	50	"
474	0.47	"	15.5	7.0	"	"	"	"	"	"	"	"
564	0.56	17.8	14.3	6.0	15.0	5.0/7.5/15.0	"	"	"	"	"	"
684	0.68	"	14.8	6.5	"	"	0.8	400	"	"	"	"
824	0.82	"	15.5	7.0	"	"	"	"	"	"	"	"
105	1.0	"	16.3	7.5	"	"	"	"	"	400	"	400
125	1.2	"	17.0	8.5	"	"	"	300	"	"	"	"
155	1.5	25.5	16.0	7.8	22.5	17.5/22.5	"	"	"	200	"	200
185	1.8	"	17.0	8.3	"	"	"	"	"	"	"	"
225	2.2	"	18.8	8.8	"	"	"	"	"	"	"	"
275	2.7	"	19.8	10.0	"	"	"	"	20	100	20	100
335	3.3	"	21.0	11.0	"	"	"	"	"	"	"	"
395	3.9	"	22.0	12.0	"	"	"	"	"	"	"	"
475	4.7	"	23.6	12.5	"	"	"	"	"	"	"	"

## 外形尺寸/ Dimension(mm)

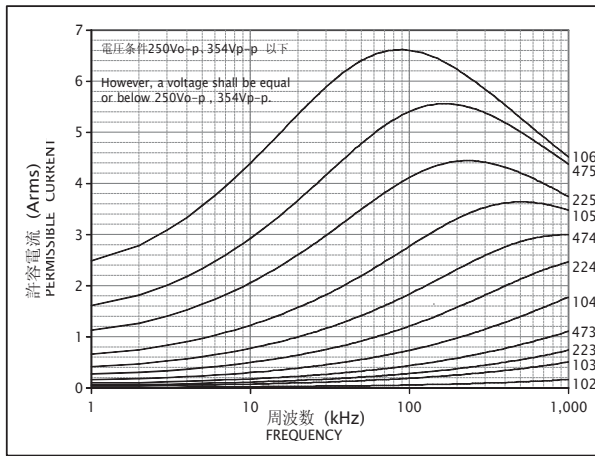
Cap CODE	Cap (μF)	MMX 450V. DC						标准包装数 Number of pieces for packing unit				
								编带 Taping	直脚品 Long		引线弯曲型 Formed	
		W	H	T	P	F	Φd	Ammo	Bag	Box	Bag	Box
104	0.10	9.8	10.8	4.5	7.5	5.0/7.5	0.6	1,000	100	1,000	100	1,000
124	0.12	12.5	10.5	4.2	10.0	"	"	"	"	"	"	"
154	0.15	"	10.7	4.6	"	"	"	"	"	"	"	"
184	0.18	"	10.0	5.5	"	"	"	"	"	"	"	"
224	0.22	"	10.5	5.8	"	"	"	"	"	"	"	"
274	0.27	"	13.5	5.2	"	"	"	"	"	500	"	500
334	0.33	"	14.3	5.8	"	"	"	"	"	"	"	"
394	0.39	"	14.5	6.3	"	"	"	500	50	"	50	"
474	0.47	"	15.5	7.0	"	"	"	"	"	"	"	"
564	0.56	17.8	14.3	6.0	15.0	5.0/7.5/15.0	"	"	"	"	"	"
684	0.68	"	14.8	6.5	"	"	0.8	400	"	"	"	"
824	0.82	"	15.5	7.0	"	"	"	"	"	"	"	"
105	1.0	"	16.3	7.5	"	"	"	"	"	400	"	"
125	1.2	"	17.0	8.5	"	"	"	300	"	"	"	"
155	1.5	25.5	16.0	7.8	22.5	17.5/22.5	"	"	"	200	"	200
185	1.8	"	17.0	8.3	"	"	"	"	"	"	"	"
225	2.2	"	18.8	8.8	"	"	"	"	"	"	"	"

外形尺寸/ Dimension(mm)

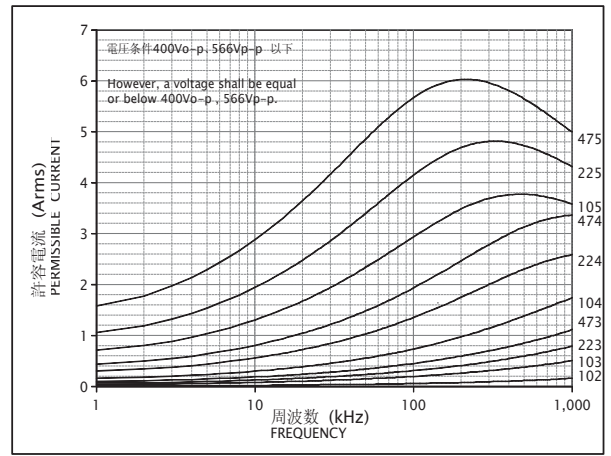
Cap CODE	Cap (μF)	MMX 630V. DC						标准包装数 Number of pieces for packing unit				
								编带 Taping		直脚品 Long		引线弯曲型 Formed
		W	H	T	P	F	Φd	Ammo	Bag	Box	Bag	Box
102	0.0010	9.8	5.5	3.5	7.5	5.0/7.5	0.6	2,000	200	2,000	200	2,000
122	0.0012	"	"	"	"	"	"	"	"	"	"	"
152	0.0015	"	"	"	"	"	"	"	"	"	"	"
182	0.0018	"	"	"	"	"	"	"	"	"	"	"
222	0.0022	"	"	"	"	"	"	"	"	"	"	"
272	0.0027	"	"	"	"	"	"	"	"	"	"	"
332	0.0033	"	6.0	4.2	"	"	"	1,000	"	"	"	"
392	0.0039	"	"	"	"	"	"	"	"	"	"	"
472	0.0047	"	"	"	"	"	"	"	"	"	"	"
562	0.0056	"	6.5	"	"	"	"	"	"	"	"	"
682	0.0068	"	"	4.4	"	"	"	"	"	"	"	"
822	0.0082	"	6.8	"	"	"	"	"	"	"	"	"
103	0.010	"	7.7	4.2	"	"	"	"	"	"	"	"
123	0.012	"	"	"	"	"	"	"	"	"	"	"
153	0.015	"	8.0	"	"	"	"	"	"	"	"	"
183	0.018	"	8.3	4.4	"	"	"	"	"	"	"	"
223	0.022	"	"	5.0	"	"	"	"	"	1,600	"	1,600
273	0.027	"	8.7	5.5	"	"	"	"	"	"	"	"
333	0.033	"	11.3	5.0	"	"	"	"	100	1,500	100	1,500
393	0.039	"	11.5	5.3	"	"	"	"	"	"	"	"
473	0.047	"	11.0	6.3	"	"	"	"	"	1,000	"	1,000
563	0.056	12.5	10.0	5.5	10.0	5.0/7.5/10.0	"	"	"	"	"	"
683	0.068	"	10.5	5.8	"	"	"	"	"	"	"	"
823	0.082	"	10.8	6.0	"	"	"	"	"	"	"	"
104	0.10	"	13.8	5.8	"	"	"	"	"	500	"	500
124	0.12	"	14.3	6.3	"	"	"	"	50	"	50	"
154	0.15	"	13.8	7.7	"	"	"	500	"	"	"	"
184	0.18	"	15.0	8.3	"	"	"	"	"	"	"	"
224	0.22	"	15.8	9.0	"	"	"	"	"	"	"	"
274	0.27	17.8	14.3	7.5	15.0	"	0.8	400	"	400	"	400
334	0.33	"	14.8	8.0	"	"	"	300	"	"	"	"
394	0.39	"	16.5	"	"	"	"	"	"	"	"	"
474	0.47	"	17.3	9.0	"	"	"	"	"	"	"	"
564	0.56	"	19.3	9.5	"	"	"	"	"	200	"	200
684	0.68	"	20.3	10.5	"	"	"	"	"	"	"	"
824	0.82	25.5	19.8	8.5	22.5	17.5/22.5	"	"	20	100	20	100
105	1.0	"	20.8	9.5	"	"	"	"	"	"	"	"
125	1.2	"	21.8	10.5	"	"	"	"	"	"	"	"
155	1.5	"	23.0	11.8	"	"	"	"	"	"	"	"
185	1.8	"	24.3	13.5	"	"	"	"	"	"	"	"
225	2.2	"	26.8	14.3	"	"	"	"	"	"	"	"

## 相对频率数允许的电流特性 / Characteristics of permissible current to frequency

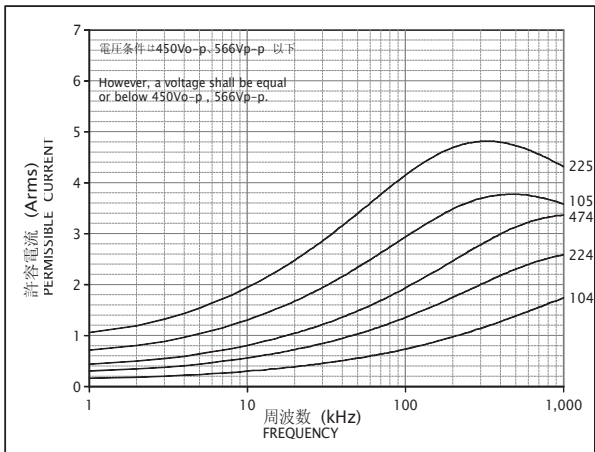
MMX 250V



MMX 400V



MMX 450V



MMX 630V

