



**SYNTON-TECH CORPORATION**

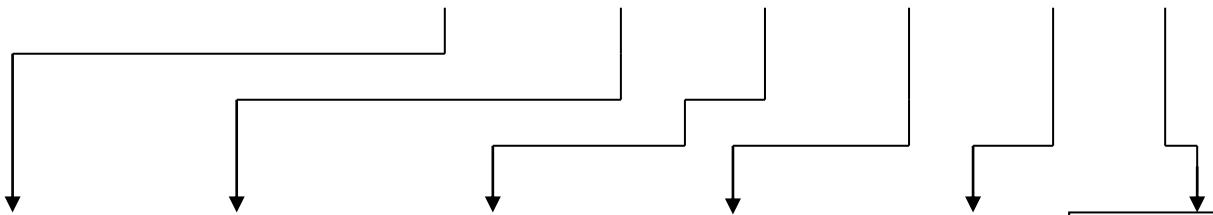
**METALLIZED POLYESTER  
FILM CAPACITOR**

File No.:	METAL-02
Version:	A
Page:	1/5
Date:	2021.01.01

● **Explanations Of Ordering Code**

**DESCRIPTION : METAL 1UF 10% 250V 20 X 20**

**SYNTON CODE : METAL 105 K 250V 20 X 20**



<u>Series</u>	<u>Capacitance</u>	<u>Tolerance</u>	<u>Voltage</u>	<u>Pitch</u>	<u>Lead</u>
METALLIZED POLYESTER FILM CAPACITOR  METAL TYPE	<u>value</u>  3 Digits : 103 : 10NF (0.01UF)  104 : 0.1UF 105 : 1UF : 106 : 10UF	J : ±5% K : ±10% M : ±20%	100V 250V 400V 630V	7.5±1.0mm 10.0 ±1.0mm 15.0 ±1.0 mm 20.5 ±1.0 mm 27.5 ±1.0 mm	<u>Length</u>  5.5±1.0mm  OR  20mm (min)

<b>APPROVED</b>	<b>CHECKED</b>	<b>DESIGNED</b>	<b>REMARK</b>	<b>DOCUMENT NO.</b>
Carol	May	Chen		0201010330



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Page:	2/5
Date:	2021.01.01

### ● Introduction

1. High stability.
2. Non-inductive.
3. Miniature size.
4. Self-healing characteristics.
5. Dipped epoxy coating protects from humidity.
6. Excellent for used in coupling, By-pass, R.F. filtering, and Solid-state application where Size is critical.

### ● Specification

1. Dielectric: Polyester film.
2. Electrodes: Metallized polyester film.
3. Coating: Epoxy resin (brown color).
4. Operating temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ .
5. Range voltage: 50V, 100V, 250V, 400V, 630VDC.
6. Capacitance: 0.01u ~ 10uF.
7. Capacitance tolerance:  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$ .
8. Test voltage: R.V.  $\times 175\%$  for 1 minute.
9. Insulation resistance:

Capacitance  $\leq 0.33\mu\text{F}$  More than 9,000  $\text{M}\Omega$

Capacitance  $> 0.33\mu\text{F}$  More than 3,000  $\text{M}\Omega \times \mu\text{F}$

10. Dissipation factor: 1% max. at 1KHz  $25^{\circ}\text{C}$
11. Dry heat resistance:  $+85^{\circ}\text{C}$  capacitance drift within  $+5\% - 0\%$ .



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File No.:	METAL-02
Version:	A
Page:	3/5
Date:	2021.01.01

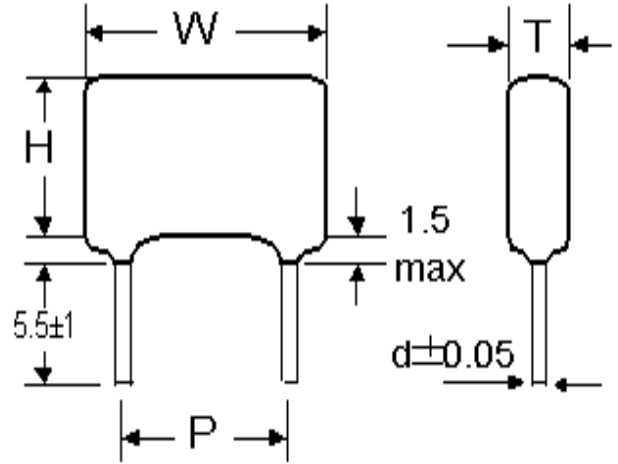
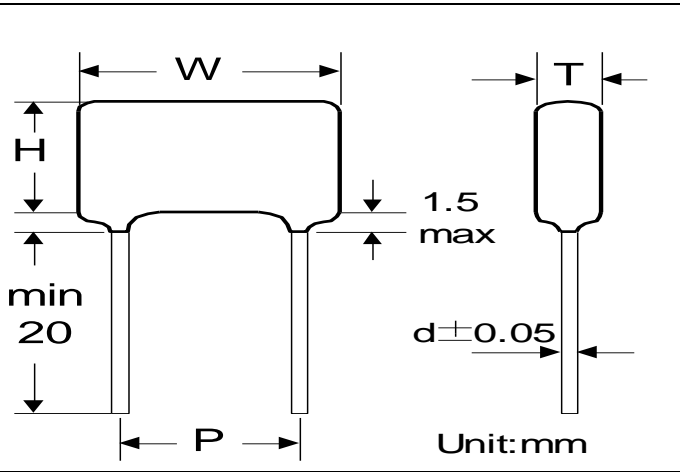
12. Low temperature resistance:  $-40^{\circ}\text{C}$  capacitance drift within  $+0\% -8\%$ .
13. Moisture-proof load life test: Temperature and humidity  $+60^{\circ}\text{C}$ , 90~95% R.H., add W.V. for 500 hours. Capacitance drift within  $\pm 8\%$ . Dissipation factor:  $<1.1\%$  Insulation resistance: over 30% of initial value.
14. High temperature load life test. Add 140% of W.V.  $85^{\circ}\text{C}$  in chamber for 1,000 hours. Capacitance drift within  $\pm 3\%$ . Dissipation factor:  $<1.1\%$  Insulation resistance: over 10% of initial value.



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Version:	A
Page:	4/5
Date:	2021.01.01



Unit: mm Max.

Capacitance		100VDC					250VDC				
Symbol	UF	W	H	T	P	d	W	H	T	P	d
103	0.01	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
							10.0	9.0	6.0	7.5	
153	0.015	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
223	0.022	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
273	0.027	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
333	0.033	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
473	0.047	13.0	10.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
563	0.056	13.0	11.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
823	0.082	13.0	11.0	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
104	0.10	13.0	12.5	5.5	10.0	0.6	13.0	10.0	5.5	10.0	0.6
154	0.15	13.0	12.5	8.0	10.0	0.6	13.0	12.5	8.0	10.0	0.6
224	0.22	13.0	12.5	8.0	10.0	0.6	18.0	12.0	7.0	15.0	0.6
334	0.33	13.0	11.5	6.5	15.0	0.6	18.0	14.0	8.0	15.0	0.6
474	0.47	18.0	12.5	7.0	15.0	0.6	18.0	15.0	9.0	15.0	0.8
684	0.68	18.0	13.5	8.0	15.0	0.6	24.0	14.0	9.5	20.0	0.8
105	1.0	18.0	16.5	9.0	15.0	0.8	24.0	18.0	10.5	20.0	0.8
155	1.5	24.0	15.0	8.5	20.0	0.8	18.0	16.0	9.0	15.0	0.8
225	2.2	24.0	21.0	12.5	20.0	0.8	18.0	15.0	9.0	15.0	0.8
335	3.3	24.0	22.0	13.0	20.0	0.8	30.0	24.0	16.5	27.5	0.8
475	4.7	30.0	23.5	14.0	27.5	0.8					
685	6.8	30.0	24.0	15.5	27.5	0.8					
106	10.0	30.0	26.0	21.5	27.5	0.8					



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Version:	A
Page:	5/5
Date:	2021.01.01

Capacitance		400VDC					630VDC				
Symbol	UF	W	H	T	P	d	W	H	T	P	d
<b>103</b>	<b>0.01</b>	13.0	10.0	5.5	10.0	0.6	13.0	10.5	6.0	10.0	0.6
							17.5	9.5	5.0	15.0	
<b>153</b>	<b>0.015</b>	13.0	10.0	6.0	10.0	0.6	13.0	11.0	6.5	10.0	0.6
<b>223</b>	<b>0.022</b>	13.0	10.0	6.0	10.0	0.6	13.0	11.0	6.5	10.0	0.6
<b>333</b>	<b>0.033</b>	13.0	11.0	6.5	10.0	0.6	13.0	12.0	7.0	10.0	0.6
<b>473</b>	<b>0.047</b>	13.0	11.5	7.0	10.0	0.6	18.0	12.5	7.5	15.0	0.6
<b>563</b>	<b>0.056</b>	13.0	12.5	7.0	10.0	0.6	18.0	14.0	8.0	15.0	0.6
<b>823</b>	<b>0.082</b>	18.0	10.5	6.0	15.0	0.8	18.0	14.0	8.0	15.0	0.8
<b>104</b>	<b>0.10</b>	18.0	11.5	6.5	15.0	0.8	18.0	15.0	9.5	15.0	0.8
<b>104</b>	<b>0.10</b>	13.0	13.5	8.5	10.0	0.6					
<b>154</b>	<b>0.15</b>	18.0	14.0	8.0	15.0	0.8	24.0	16.5	9.0	20.0	0.8
<b>224</b>	<b>0.22</b>	18.0	15.0	9.5	15.0	0.8	24.0	16.5	10.5	20.0	0.8
<b>224</b>	<b>0.22</b>	13.0	14.0	9.5	10.0	0.6					
<b>334</b>	<b>0.33</b>	24.0	16.0	9.0	20.0	0.8	24.0	18.0	12.0	20.0	0.8
<b>394</b>	<b>0.39</b>	-	-	-	-	-	17.0	14.0	8.5	15.0	0.8
<b>474</b>	<b>0.47</b>	24.0	17.5	10.5	20.0	0.8	30.0	22.0	12.5	27.5	0.8
<b>474</b>	<b>0.47</b>	18.0	15.0	9.0	15.0	0.8					
<b>684</b>	<b>0.68</b>	30.0	17.5	10.5	27.5	0.8	30.0	23.5	14.0	27.5	0.8
<b>105</b>	<b>1.0</b>	30.0	21.5	12.0	27.5	0.8	30.0	28.5	18.0	27.5	0.8
<b>105</b>	<b>1.0</b>	-	-	-	-	-	30.0	15.5	8.5	27.5	0.8
<b>155</b>	<b>1.5</b>	30.0	24.0	14.0	27.5	0.8					
<b>225</b>	<b>2.2</b>	30.0	26.0	16.0	27.5	0.8	30	33	17	27.5	0.8
<b>335</b>	<b>3.3</b>										
<b>475</b>	<b>4.7</b>										
<b>685</b>	<b>6.8</b>						P	10.0	15.0	20.0	27.5
<b>106</b>	<b>10.0</b>						Tol.	±1.0	±1.0	±1.5	±2.0