



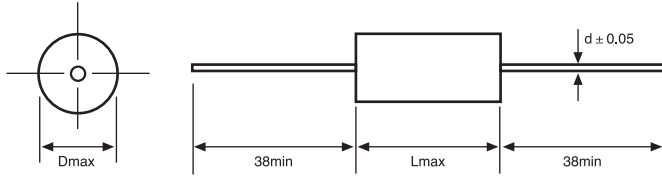
**規 格 承 認 書**  
**(SPECIFICATION FOR APPROVAL)**

File No.: Q/BH .TS16949.13TECH1303

Product Name: Metallized polypropylene film capacitor(Axial-type)  
Product Type: C30(CBB20 圆轴向)  
Product Code: C30  
Customer:  
Customer Code:  
Issue Date: (V3.0)

## 轴向金属化聚丙烯膜电容器 Metallized polypropylene film capacitor(Axial-type)

### ■ 外形图 Outline Drawing



### ■ 特点

- 金属化聚丙烯，无感卷绕结构，轴向
- 自愈性能优异
- 外包聚酯胶带纸，两端灌注阻燃性环氧树脂

### ■ Features

- Metalized Polypropylene film, non-inductive type, axial
- Excellent self-healing property
- Wrapped with polyester adhesive tape and ends filled with Flame retardant epoxy resin

### ■ 主要用途

- 温度补偿电路
- 定时、振荡电路
- 功率因素校正、开关电源耦合用

### ■ Typical Applications

- Temperature compensation circuits
- Timing, oscillator circuits
- Power factor correction and coupling capacitor in SMPS applications

### ■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 10190 (IEC 60384-16)							
气候类别 Climatic Category	40/085/21							
额定温度 Rated Temperature	85 ℃							
额定电压 Rated Voltage	100/160V、250V、400V、630V、1 000V、1 250V							
电容量范围 Capacitance Range	0.0010μF ~ 15μF							
电容量偏差 Capacitance Tolerance	± 5%(J)、± 10%(K)、± 20%(M)							
耐电压 Voltage Proof	1.6U <sub>R</sub> (5s)							
损耗角正切 Dissipation Factor	< 10 × 10 <sup>-4</sup> (1kHz, 20 ℃)							
绝缘电阻 Insulation Resistance	> 100 000MΩ C <sub>R</sub> < 0.33μF > 30 000s C <sub>R</sub> > 0.33 μF (20 ℃, 100V, 1min)							
最大脉冲爬升速率Maximum Pulse Rise Time (dV/dt): 若实际工作电压U比额定电压U <sub>R</sub> 低，电容器可工作在更高的dV/dt场合。这样dV/dt允许值应为右表值乘以U <sub>R</sub> /U。 If the working voltage (U) is lower than the rated voltage (U <sub>R</sub> ), the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the right value with U <sub>R</sub> /U.	U <sub>R</sub> (V)	dV/dt(V/μs)						
		L=12.0	L=14.5	L=20.0	L=27.5	L=33.0	L=41.5	L=56.5
	100/160	150	110	80	60	50	35	20
	250	300	220	150	110	90	60	30
	400	460	330	250	180	120	80	45
	630	600	440	300	220	150	100	60
	1 000	800	550	400	300	200	150	80
1 250	1 000	750	580	400	300	200	100	

### The 18 digits part number is formed as follow:

<p>第1~3位 型号代码 C30= CBB20</p> <p>第4~5位 直流额定电压 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V 3A=1 000V 3B=1 250V</p> <p>第6~8位 标称容量 举例：103=10 × 10<sup>3</sup> pF=0.01μF</p> <p>第9位 容量偏差 J= ± 5%, K= ± 10%, M= ± 10%</p> <p>第10位 轴向 0代表轴向</p> <p>第11位 内部特征码</p> <p>第12~15位 引线长度 C000 表示标准的引线长度(38mm min)</p> <p>第16~18位 内部特征码</p>	<p>Digit 1 to 3 Series code C30= CBB20</p> <p>Digit 4 to 5 DC rated voltage 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V 3A=1 000V 3B=1 250V</p> <p>Digit 6 to 8 Rated capacitance value For example: 103=10 × 10<sup>3</sup> pF=0.01μF</p> <p>Digit 9 Capacitance tolerance J= ± 5%, K= ± 10%, M= ± 20%</p> <p>Digit 10 Axial 0=axial</p> <p>Digit 11 Internal use</p> <p>Digit 12 to 15 Lead length C000 means standard lead length(38mm min)</p> <p>Digit 16 to 18 Internal use</p>
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■ 外形尺寸 Dimensions(mm)

100Vdc(60Vac)/160Vdc(90Vac)#					250Vdc(160Vac)					400Vdc(200Vac)				
C <sub>R</sub> (μF)	D max	L max	d	Part number	C <sub>R</sub> (μF)	D max	L max	d	Part number	C <sub>R</sub> (μF)	D max	L max	d	Part number
0.022	5.0	12.0	0.6	C302A223-00C000+++	0.010	5.0	12.0	0.6	C302E103-00C000+++	0.0068	5.0	12.0	0.6	C302G682-00C000+++
0.027	5.0	12.0	0.6	C302A273-00C000+++	0.012	5.0	12.0	0.6	C302E123-00C000+++	0.0082	5.0	12.0	0.6	C302G822-00C000+++
0.033	5.0	12.0	0.6	C302A333-00C000+++	0.015	5.0	12.0	0.6	C302E153-00C000+++	0.010	5.0	12.0	0.6	C302G103-00C000+++
0.039	5.0	12.0	0.6	C302A393-00C000+++	0.018	5.0	12.0	0.6	C302E183-00C000+++	0.012	5.0	12.0	0.6	C302G123-00C000+++
0.047	5.0	12.0	0.6	C302A473-00C000+++	0.022	5.0	12.0	0.6	C302E223-00C000+++	0.015	5.0	12.0	0.6	C302G153-00C000+++
0.056	5.0	12.0	0.6	C302A563-00C000+++	0.027	5.0	12.0	0.6	C302E273-00C000+++	0.018	5.5	12.0	0.6	C302G183-00C000+++
0.068	5.5	12.0	0.6	C302A683-00C000+++	0.033	5.5	12.0	0.6	C302E333-00C000+++	0.022	5.5	12.0	0.6	C302G223-00C000+++
0.082	5.0	14.5	0.6	C302A823-00C000+++	0.039	5.0	14.5	0.6	C302E393-00C000+++	0.027	5.0	14.5	0.6	C302G273-00C000+++
0.10	5.5	14.5	0.6	C302A104-00C000+++	0.047	5.5	14.5	0.6	C302E473-00C000+++	0.033	5.5	14.5	0.6	C302G333-00C000+++
0.12	6.0	14.5	0.6	C302A124-00C000+++	0.056	5.5	14.5	0.6	C302E563-00C000+++	0.039	6.0	14.5	0.6	C302G393-00C000+++
0.15	6.5	14.5	0.6	C302A154-00C000+++	0.068	6.0	14.5	0.6	C302E683-00C000+++	0.047	6.5	14.5	0.6	C302G473-00C000+++
0.18	7.0	14.5	0.8	C302A184-00C000+++	0.082	6.5	14.5	0.6	C302E823-00C000+++	0.056	6.5	14.5	0.6	C302G563-00C000+++
0.22	7.5	14.5	0.8	C302A224-00C000+++	0.10	7.0	14.5	0.8	C302E104-00C000+++	0.068	7.0	14.5	0.8	C302G683-00C000+++
0.27	8.5	14.5	0.8	C302A274-00C000+++	0.12	7.5	14.5	0.8	C302E124-00C000+++	0.082	7.5	14.5	0.8	C302G823-00C000+++
0.33	7.0	20.0	0.8	C302A334-00C000+++	0.15	8.0	14.5	0.8	C302E154-00C000+++	0.10	7.0	20.0	0.8	C302G104-00C000+++
0.39	7.5	20.0	0.8	C302A394-00C000+++	0.18	8.5	14.5	0.8	C302E184-00C000+++	0.12	7.5	20.0	0.8	C302G124-00C000+++
0.47	8.0	20.0	0.8	C302A474-00C000+++	0.22	7.5	20.0	0.8	C302E224-00C000+++	0.15	8.0	20.0	0.8	C302G154-00C000+++
0.56	9.0	20.0	0.8	C302A564-00C000+++	0.27	8.0	20.0	0.8	C302E274-00C000+++	0.18	8.5	20.0	0.8	C302G184-00C000+++
0.68	8.0	27.5	0.8	C302A684-00C000+++	0.33	9.0	20.0	0.8	C302E334-00C000+++	0.22	9.0	20.0	0.8	C302G224-00C000+++
0.82	8.5	27.5	0.8	C302A824-00C000+++	0.39	9.5	20.0	0.8	C302E394-00C000+++	0.27	10.0	20.0	0.8	C302G274-00C000+++
1.0	9.5	27.5	0.8	C302A105-00C000+++	0.47	8.5	27.5	0.8	C302E474-00C000+++	0.33	9.0	27.5	0.8	C302G334-00C000+++
1.2	10.0	27.5	0.8	C302A125-00C000+++	0.56	9.0	27.5	0.8	C302E564-00C000+++	0.39	9.5	27.5	0.8	C302G394-00C000+++
1.5	11.5	27.5	0.8	C302A155-00C000+++	0.68	10.0	27.5	0.8	C302E684-00C000+++	0.47	10.0	27.5	0.8	C302G474-00C000+++
1.8	12.0	27.5	0.8	C302A185-00C000+++	0.82	10.5	27.5	0.8	C302E824-00C000+++	0.56	10.5	27.5	0.8	C302G564-00C000+++
2.2	12.0	33.0	0.8	C302A225-00C000+++	1.0	12.0	27.5	0.8	C302E105-00C000+++	0.68	12.0	27.5	0.8	C302G684-00C000+++
2.7	13.0	33.0	0.8	C302A275-00C000+++	1.2	12.5	27.5	0.8	C302E125-00C000+++	0.82	13.0	27.5	0.8	C302G824-00C000+++
3.3	14.0	33.0	0.8	C302A335-00C000+++	1.5	12.5	33.0	0.8	C302E155-00C000+++	1.0	12.5	33.0	0.8	C302G105-00C000+++
3.9	15.0	33.0	0.8	C302A395-00C000+++	1.8	13.5	33.0	0.8	C302E185-00C000+++	1.2	13.5	33.0	0.8	C302G125-00C000+++
4.7	16.5	33.0	1.0	C302A475-00C000+++	2.2	14.5	33.0	0.8	C302E225-00C000+++	1.5	15.0	33.0	0.8	C302G155-00C000+++
5.6	17.5	33.0	1.0	C302A565-00C000+++	2.7	16.0	33.0	1.0	C302E275-00C000+++	1.8	16.0	33.0	1.0	C302G185-00C000+++
6.8	17.5	41.5	1.0	C302A685-00C000+++	3.3	17.5	33.0	1.0	C302E335-00C000+++	2.2	17.5	33.0	1.0	C302G225-00C000+++
8.2	19.0	41.5	1.0	C302A825-00C000+++	3.9	18.5	33.0	1.0	C302E395-00C000+++	2.7	19.0	33.0	1.0	C302G275-00C000+++
10.0	20.5	41.5	1.0	C302A106-00C000+++	4.7	18.0	41.5	1.0	C302E475-00C000+++	3.3	18.5	41.5	1.0	C302G335-00C000+++
12.0	19.0	56.5	1.0	C302A126-00C000+++	5.6	19.5	41.5	1.0	C302E565-00C000+++	3.9	20.0	41.5	1.0	C302G395-00C000+++
15.0	21.0	56.5	1.0	C302A156-00C000+++	6.8	21.5	41.5	1.0	C302E685-00C000+++	4.7	21.5	41.5	1.0	C302G475-00C000+++
					8.2	23.0	41.5	1.0	C302E825-00C000+++	5.6	23.5	41.5	1.0	C302G565-00C000+++
					10.0	21.5	56.5	1.0	C302E106-00C000+++	6.8	21.5	56.5	1.0	C302G685-00C000+++
					12.0	23.5	56.5	1.0	C302E126-00C000+++	8.2	23.5	56.5	1.0	C302G825-00C000+++
					15.0	25.5	56.5	1.0	C302E156-00C000+++	10.0	25.5	56.5	1.0	C302G106-00C000+++

备注: 1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%  
2. “#”当额定电压为160Vdc时,第4~5位是2C。“#”when the rated voltage is 160Vdc,the digit 4~5 is 2C.



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■ 续 Continued

630Vdc(220Vac) <sup>@</sup>					1 000Vdc(350Vac)					1 250Vdc(400Vac)				
C <sub>R</sub> (μF)	D max	L max	d	Part number	C <sub>R</sub> (μF)	D max	L max	d	Part number	C <sub>R</sub> (μF)	D max	L max	d	Part number
0.0010	5.0	12.0	0.6	C302J102-00C000+++	0.0010	5.0	12.0	0.6	C303A102-00C000+++	0.0010	5.0	12.0	0.6	C303B102-00C000+++
0.0012	5.0	12.0	0.6	C302J122-00C000+++	0.0012	5.0	12.0	0.6	C303A122-00C000+++	0.0012	5.5	12.0	0.6	C303B122-00C000+++
0.0015	5.0	12.0	0.6	C302J152-00C000+++	0.0015	5.0	12.0	0.6	C303A152-00C000+++	0.0015	5.5	12.0	0.6	C303B152-00C000+++
0.0018	5.0	12.0	0.6	C302J182-00C000+++	0.0018	5.5	12.0	0.6	C303A182-00C000+++	0.0018	6.0	12.0	0.6	C303B182-00C000+++
0.0022	5.0	12.0	0.6	C302J222-00C000+++	0.0022	6.0	12.0	0.6	C303A222-00C000+++	0.0022	6.5	12.0	0.6	C303B222-00C000+++
0.0027	5.0	12.0	0.6	C302J272-00C000+++	0.0027	6.0	12.0	0.6	C303A272-00C000+++	0.0027	5.5	14.5	0.6	C303B272-00C000+++
0.0033	5.0	12.0	0.6	C302J332-00C000+++	0.0033	6.5	12.0	0.6	C303A332-00C000+++	0.0033	6.0	14.5	0.6	C303B332-00C000+++
0.0039	5.0	12.0	0.6	C302J392-00C000+++	0.0039	5.5	14.5	0.6	C303A392-00C000+++	0.0039	6.0	14.5	0.6	C303B392-00C000+++
0.0047	5.0	12.0	0.6	C302J472-00C000+++	0.0047	5.5	14.5	0.6	C303A472-00C000+++	0.0047	6.5	14.5	0.6	C303B472-00C000+++
0.0056	5.0	12.0	0.6	C302J562-00C000+++	0.0056	6.5	14.5	0.6	C303A562-00C000+++	0.0056	7.0	14.5	0.8	C303B562-00C000+++
0.0068	5.5	12.0	0.6	C302J682-00C000+++	0.0068	6.5	14.5	0.6	C303A682-00C000+++	0.0068	7.5	14.5	0.8	C303B682-00C000+++
0.0082	5.0	14.5	0.6	C302J822-00C000+++	0.0082	7.0	14.5	0.8	C303A822-00C000+++	0.0082	8.0	14.5	0.8	C303B822-00C000+++
0.010	5.5	14.5	0.6	C302J103-00C000+++	0.010	7.5	14.5	0.8	C303A103-00C000+++	0.010	8.5	14.5	0.8	C303B103-00C000+++
0.012	5.5	14.5	0.6	C302J123-00C000+++	0.012	8.0	14.5	0.8	C303A123-00C000+++	0.012	7.0	20.0	0.8	C303B123-00C000+++
0.015	6.0	14.5	0.6	C302J153-00C000+++	0.015	8.5	14.5	0.8	C303A153-00C000+++	0.015	7.5	20.0	0.8	C303B153-00C000+++
0.018	6.5	14.5	0.6	C302J183-00C000+++	0.018	7.5	20.0	0.8	C303A183-00C000+++	0.018	8.0	20.0	0.8	C303B183-00C000+++
0.022	7.0	14.5	0.8	C302J223-00C000+++	0.022	8.0	20.0	0.8	C303A223-00C000+++	0.022	8.5	20.0	0.8	C303B223-00C000+++
0.027	7.5	14.5	0.8	C302J273-00C000+++	0.027	8.5	20.0	0.8	C303A273-00C000+++	0.027	9.5	20.0	0.8	C303B273-00C000+++
0.033	7.0	20.0	0.8	C302J333-00C000+++	0.033	9.0	20.0	0.8	C303A333-00C000+++	0.033	10.5	20.0	0.8	C303B333-00C000+++
0.039	7.5	20.0	0.8	C302J393-00C000+++	0.039	10.0	20.0	0.8	C303A393-00C000+++	0.039	9.0	27.5	0.8	C303B393-00C000+++
0.047	8.0	20.0	0.8	C302J473-00C000+++	0.047	10.5	20.0	0.8	C303A473-00C000+++	0.047	9.5	27.5	0.8	C303B473-00C000+++
0.056	8.5	20.0	0.8	C302J563-00C000+++	0.056	9.0	27.5	0.8	C303A563-00C000+++	0.056	10.0	27.5	0.8	C303B563-00C000+++
0.068	9.0	20.0	0.8	C302J683-00C000+++	0.068	9.5	27.5	0.8	C303A683-00C000+++	0.068	11.0	27.5	0.8	C303B683-00C000+++
0.082	9.5	20.0	0.8	C302J823-00C000+++	0.082	10.5	27.5	0.8	C303A823-00C000+++	0.082	12.0	27.5	0.8	C303B823-00C000+++
0.10	8.5	27.5	0.8	C302J104-00C000+++	0.10	11.5	27.5	0.8	C303A104-00C000+++	0.10	13.0	27.5	0.8	C303B104-00C000+++
0.12	9.0	27.5	0.8	C302J124-00C000+++	0.12	12.0	27.5	0.8	C303A124-00C000+++	0.12	12.5	33.0	0.8	C303B124-00C000+++
0.15	10.0	27.5	0.8	C302J154-00C000+++	0.15	12.0	33.0	0.8	C303A154-00C000+++	0.15	13.5	33.0	0.8	C303B154-00C000+++
0.18	10.5	27.5	0.8	C302J184-00C000+++	0.18	13.0	33.0	0.8	C303A184-00C000+++	0.18	14.5	33.0	0.8	C303B184-00C000+++
0.22	12.0	27.5	0.8	C302J224-00C000+++	0.22	14.0	33.0	0.8	C303A224-00C000+++	0.22	16.0	33.0	1.0	C303B224-00C000+++
0.27	13.0	27.5	0.8	C302J274-00C000+++	0.27	15.0	33.0	0.8	C303A274-00C000+++	0.27	17.0	33.0	1.0	C303B274-00C000+++
0.33	12.5	33.0	0.8	C302J334-00C000+++	0.33	16.5	33.0	1.0	C303A334-00C000+++	0.33	17.0	41.5	1.0	C303B334-00C000+++
0.39	13.5	33.0	0.8	C302J394-00C000+++	0.39	18.0	33.0	1.0	C303A394-00C000+++	0.39	18.0	41.5	1.0	C303B394-00C000+++
0.47	14.5	33.0	0.8	C302J474-00C000+++	0.47	17.5	41.5	1.0	C303A474-00C000+++	0.47	19.5	41.5	1.0	C303B474-00C000+++
0.56	15.5	33.0	0.8	C302J564-00C000+++	0.56	19.0	41.5	1.0	C303A564-00C000+++	0.56	21.0	41.5	1.0	C303B564-00C000+++
0.68	17.0	33.0	1.0	C302J684-00C000+++	0.68	20.5	41.5	1.0	C303A684-00C000+++	0.68	20.0	56.5	1.0	C303B684-00C000+++
0.82	18.0	33.0	1.0	C302J824-00C000+++	0.82	22.0	41.5	1.0	C303A824-00C000+++	0.82	21.5	56.5	1.0	C303B824-00C000+++
1.0	17.5	41.5	1.0	C302J105-00C000+++	1.0	20.5	56.5	1.0	C303A105-00C000+++	1.0	23.0	56.5	1.0	C303B105-00C000+++
1.2	19.0	41.5	1.0	C302J125-00C000+++	1.2	22.0	56.5	1.0	C303A125-00C000+++	1.2	25.0	56.5	1.0	C303B125-00C000+++
1.5	21.0	41.5	1.0	C302J155-00C000+++	1.5	24.5	56.5	1.0	C303A155-00C000+++	1.5	27.5	56.5	1.0	C303B155-00C000+++
1.8	22.5	41.5	1.0	C302J185-00C000+++										
2.2	24.5	41.5	1.0	C302J225-00C000+++										
2.7	23.0	56.5	1.0	C302J275-00C000+++										
3.3	25.0	56.5	1.0	C302J335-00C000+++										

备注: 1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%  
 2. “@”不用作跨线,请参见抗干扰电容器(Pag.116)  
 “@” Not suitable for across-the-line applications. Pls refer to Interference Suppression Capacitors(Pag. 116)