

## CBB20A series / Metallized polypropylene film capacitor (Axial-type)

### General Technical Characteristics 一般特性

Metallized polypropylene film, non-inductive type, axial  
 金属化聚丙烯膜，无感卷绕结构，轴向  
 Excellent self-healing property  
 自愈性能优异  
 Wrapped with polyester adhesive tape and ends filled  
 with flame retardant epoxy resin  
 外包聚酯胶带纸，两端灌注阻燃性环氧树脂

### Typical Applications 典型应用

Temperature compensation circuits  
 温度补偿电路  
 Timing, oscillator circuits  
 定时，振荡电路  
 Power factor correction and coupling capacitor in SMPS  
 applications  
 功率因素校正,开关电源耦合应用

### Electrical Characteristics 电气特性

Reference Standard 引用标准: GB/T 10190 (IEC60384-16)  
 Climatic Category 气候类别: 40/85/21  
 Rated Temperature 额定温度: 85°C  
 Operating Temperature Range: -40°C ~ 105°C  
 工作温度范围: (+85°C to +105°C: decreasing factor 1.25% per °C for  $U_R$ )  
 Rated Voltage 额定电压: 100V/160V, 250V, 400V, 630V, 1000V, 1250V  
 Capacitance Range 电容量范围: 0.0010 $\mu$ F ~ 15.0 $\mu$ F  
 Capacitance Tolerance 电容量偏差:  $\pm 5\%$  (J),  $\pm 10\%$  (K),  $\pm 20\%$  (M),  
 Dissipation Factor 损耗角正切:  $\leq 0.1\%$  Measured at 1KHz and 20°C.  
 Test Voltage 耐电压:  $1.6U_R$  for 5 sec.  
 Insulation Resistance 绝缘电阻:  $\geq 50\ 000\Omega$ , for  $CR \leq 0.33\mu F$   
 $\geq 15\ 000s$ , for  $CR > 0.33\mu F$  Measured at 20°C, 100V and 1 min.

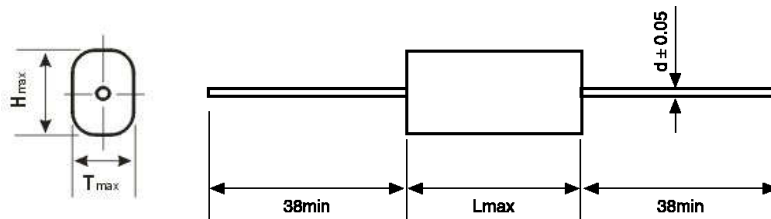
Maximum Pulse Rise Time(dV/dt) 最大脉冲爬升速率:

$U_R$ (V)	dV/dt (V/ $\mu$ s)						
	L=12	L=14.5	L=20	L=27.5	L=33	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
1000	800	550	400	300	200	150	80
1250	1000	750	580	400	300	200	100

If the working voltage (U) is lower than the rated voltage ( $U_R$ ), the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the left value with  $U_R/U$ .

若实际工作电压 U 比额定电压  $U_R$  低，电容器可工作在更高的 dV/dt 场合，这样 dV/dt 允许值应为左表值乘以  $U_R/U$ 。

### Outline Drawing 外形图



### Part Number System 产品编码说明

K6A	2A	334	K	H	L	0	40	***
型号代码	额定电压	标称容量	容量偏差	产品长度 L	引线加工/包装代码	引线类型	引线长度	内部编码
Series Code:	Voltage:	Capacitance:	Cap. Tol.:	Length:	Lead form and packaging code:	Lead type:	Lead length:	Internal code
K6A:	2A=100V	104: 0.1 $\mu$ F	J: $\pm 5\%$ , K: $\pm 10\%$	G=12.0mm H=14.5mm	L=straight lead	0=none	05=5mm 40=40mm	code
CBB20A	2C=160V	105: 1.0 $\mu$ F	M: $\pm 20\%$	I=20.0mm L=27.5mm N=33.0mm Q=42.0mm T=56.0mm				
Series	2E=250V 2G=400V 2J=630V 3A=1000V 3B=1250V							

**CBB20A series / Metallized polypropylene film capacitor (Axial-type)**

**Electrical Specification & Part Numbers Reference 规格型号参考**

Unit: mm (max)

Cap (μF)	100VDC (60VAC) / 160VDC (90VAC)				Part Number
	T	H	L	d	
0.022	4.0	8.0	12.0	0.6	K6A2A223*****
0.027	4.0	8.0	12.0	0.6	K6A2A273*****
0.033	4.0	8.0	12.0	0.6	K6A2A333*****
0.039	4.0	8.0	12.0	0.6	K6A2A393*****
0.047	4.0	8.0	12.0	0.6	K6A2A473*****
0.056	4.0	8.0	12.0	0.6	K6A2A563*****
0.068	4.5	8.5	12.0	0.6	K6A2A683*****
0.082	4.5	9.0	14.5	0.6	K6A2A823*****
0.10	4.5	9.0	14.5	0.6	K6A2A104*****
0.12	4.5	9.0	14.5	0.6	K6A2A124*****
0.15	5.0	9.5	14.5	0.6	K6A2A154*****
0.18	5.5	10.0	14.5	0.8	K6A2A184*****
0.22	6.0	11.0	14.5	0.8	K6A2A224*****
0.27	6.5	11.5	14.5	0.8	K6A2A274*****
0.33	5.0	10.5	20.0	0.8	K6A2A334*****
0.39	5.5	11.5	20.0	0.8	K6A2A394*****
0.47	5.5	13.0	20.0	0.8	K6A2A474*****
0.56	6.0	13.5	20.0	0.8	K6A2A564*****
0.68	6.0	13.0	27.5	0.8	K6A2A684*****
0.82	6.5	14.0	27.5	0.8	K6A2A824*****
1.0	6.5	16.5	27.5	0.8	K6A2A105*****
1.2	7.0	17.5	27.5	0.8	K6A2A125*****
1.5	8.0	18.0	27.5	0.8	K6A2A155*****
1.8	9.0	19.5	27.5	0.8	K6A2A185*****
2.2	8.5	18.5	33.0	0.8	K6A2A225*****
2.7	9.5	19.5	33.0	0.8	K6A2A275*****
3.3	10.5	20.5	33.0	0.8	K6A2A335*****
3.9	11.5	21.5	33.0	0.8	K6A2A395*****
4.7	12.5	23.0	33.0	1.0	K6A2A475*****
5.6	13.5	24.0	33.0	1.0	K6A2A565*****
6.8	12.5	23.0	42.0	1.0	K6A2A685*****
8.2	14.0	24.5	42.0	1.0	K6A2A825*****
10.0	15.5	26.5	42.0	1.0	K6A2A106*****
12.0	14.5	25.0	56.0	1.0	K6A2A125*****
15.0	16.5	27.0	56.0	1.0	K6A2A156*****

Cap (μF)	250VDC (160VAC)				Part Number
	T	H	L	d	
0.010	4.0	8.0	12.0	0.6	K6A2E103*****
0.012	4.0	8.0	12.0	0.6	K6A2E123*****
0.015	4.0	8.0	12.0	0.6	K6A2E153*****
0.018	4.0	8.0	12.0	0.6	K6A2E183*****
0.022	4.0	8.0	12.0	0.6	K6A2E223*****
0.027	4.0	8.0	12.0	0.6	K6A2E273*****
0.033	4.5	8.5	12.0	0.6	K6A2E333*****
0.039	4.5	8.5	14.5	0.6	K6A2E393*****
0.047	4.5	9.0	14.5	0.6	K6A2E473*****
0.056	5.0	9.5	14.5	0.6	K6A2E563*****
0.068	5.5	9.5	14.5	0.6	K6A2E683*****
0.082	5.5	9.5	14.5	0.6	K6A2E823*****
0.10	5.5	9.5	14.5	0.8	K6A2E104*****
0.12	5.5	9.5	14.5	0.8	K6A2E124*****
0.15	5.5	9.5	14.5	0.8	K6A2E154*****
0.18	5.5	10.0	14.5	0.8	K6A2E184*****
0.22	4.5	9.5	20.0	0.8	K6A2E224*****
0.27	5.0	9.5	20.0	0.8	K6A2E274*****
0.33	5.5	10.0	20.0	0.8	K6A2E334*****
0.39	5.5	11.0	20.0	0.8	K6A2E394*****
0.47	5.5	12.5	27.5	0.8	K6A2E474*****
0.56	5.0	11.0	27.5	0.8	K6A2E564*****
0.68	5.5	13.0	27.5	0.8	K6A2E684*****
0.82	6.5	13.5	27.5	0.8	K6A2E824*****
1.0	6.5	16.5	27.5	0.8	K6A2E105*****
1.2	7.0	17.0	27.5	0.8	K6A2E125*****
1.5	6.5	17.0	33.0	0.8	K6A2E155*****
1.8	7.0	17.5	33.0	0.8	K6A2E185*****
2.2	8.0	18.5	33.0	0.8	K6A2E225*****
2.7	9.0	19.5	33.0	0.8	K6A2E275*****
3.3	10.0	20.5	33.0	1.0	K6A2E335*****
3.9	11.0	21.5	33.0	1.0	K6A2E395*****
4.7	10.0	20.5	42.0	1.0	K6A2E475*****
5.6	11.0	21.5	42.0	1.0	K6A2E565*****
6.8	12.0	23.0	42.0	1.0	K6A2E685*****
8.2	13.5	24.5	42.0	1.0	K6A2E825*****
10.0	13.0	24.0	56.0	1.0	K6A2E106*****
12.0	15.0	25.0	56.0	1.0	K6A2E126*****
15.0	17.0	27.0	56.0	1.0	K6A2E156*****

备注：1. “\*\*\*\*\*” = Capacitance tolerance code, Pitch, Lead form and packaging code, Lead type, Lead length, Internal code.  
 “\*\*\*\*\*” 表示容量偏差，引线脚距，引线加工和包装代码，引线类型，引线长度，内部编码。

2. Customization for special specification and requirement is available.

**CBB20A series / Metallized polyester film capacitor (Axial type)**

**Electrical Specification & Part Numbers Reference 规格型号参考 (mm)**

Cap (μF)	400VDC (200VAC)				Part Number
	T	H	L	d	
0.0068	4.0	8.0	12.0	0.6	K6A2G682*****
0.0082	4.0	8.0	12.0	0.6	K6A2G822*****
0.010	4.0	8.0	12.0	0.6	K6A2G103*****
0.012	4.0	8.0	12.0	0.6	K6A2G123*****
0.015	4.0	8.0	12.0	0.6	K6A2G153*****
0.018	4.0	8.0	12.0	0.6	K6A2G183*****
0.022	4.0	8.0	12.0	0.6	K6A2G223*****
0.027	4.5	8.5	14.5	0.6	K6A2G273*****
0.033	5.0	9.5	14.5	0.6	K6A2G333*****
0.039	5.0	9.5	14.5	0.6	K6A2G393*****
0.047	5.0	9.5	14.5	0.6	K6A2G473*****
0.056	5.0	9.5	14.5	0.6	K6A2G563*****
0.068	5.5	10.0	14.5	0.8	K6A2G683*****
0.082	6.0	10.5	14.5	0.8	K6A2G823*****
0.10	5.0	9.5	20.0	0.8	K6A2G104*****
0.12	5.5	10.0	20.0	0.8	K6A2G124*****
0.15	6.0	10.5	20.0	0.8	K6A2G154*****
0.18	6.5	11.5	20.0	0.8	K6A2G184*****
0.22	7.5	12.5	20.0	0.8	K6A2G224*****
0.27	8.0	13.5	20.0	0.8	K6A2G274*****
0.33	7.0	14.0	27.5	0.8	K6A2G334*****
0.39	7.5	14.5	27.5	0.8	K6A2G394*****
0.47	8.0	15.0	27.5	0.8	K6A2G474*****
0.56	7.5	18.0	27.5	0.8	K6A2G564*****
0.68	8.5	19.0	27.5	0.8	K6A2G684*****
0.82	9.5	20.0	27.5	0.8	K6A2G824*****
1.0	8.5	19.0	33.0	0.8	K6A2G105*****
1.2	9.5	20.0	33.0	0.8	K6A2G125*****
1.5	10.5	21.0	33.0	0.8	K6A2G155*****
1.8	11.5	22.0	33.0	1.0	K6A2G185*****
2.2	13.0	23.5	33.0	1.0	K6A2G225*****
2.7	14.5	25.0	33.0	1.0	K6A2G275*****
3.3	14.0	24.0	42.0	1.0	K6A2G335*****
3.9	15.0	26.0	42.0	1.0	K6A2G395*****
4.7	16.5	27.5	42.0	1.0	K6A2G475*****
5.6	18.5	29.0	42.0	1.0	K6A2G565*****
6.8	17.0	27.5	56.0	1.0	K6A2G685*****
8.2	19.0	29.5	56.0	1.0	K6A2G825*****
10.0	21.0	31.5	56.0	1.0	K6A2G106*****

Cap (μF)	630VDC (220VAC)				Part Number
	T	H	L	d	
0.0010	4.0	8.0	12.0	0.6	K6A2J102*****
0.0012	4.0	8.0	12.0	0.6	K6A2J122*****
0.0015	4.0	8.0	12.0	0.6	K6A2J152*****
0.0018	4.0	8.0	12.0	0.6	K6A2J182*****
0.0022	4.0	8.0	12.0	0.6	K6A2J222*****
0.0027	4.0	8.0	12.0	0.6	K6A2J272*****
0.0033	4.0	8.0	12.0	0.6	K6A2J332*****
0.0039	4.0	8.0	12.0	0.6	K6A2J392*****
0.0047	4.0	8.0	12.0	0.6	K6A2J472*****
0.0056	4.0	8.0	12.0	0.6	K6A2J562*****
0.0068	4.5	8.5	12.0	0.6	K6A2J682*****
0.0082	4.5	9.0	14.5	0.6	K6A2J822*****
0.010	5.0	9.5	14.5	0.6	K6A2J103*****
0.012	5.5	10.0	14.5	0.6	K6A2J123*****
0.015	5.5	10.0	14.5	0.6	K6A2J153*****
0.018	5.5	10.0	14.5	0.6	K6A2J183*****
0.022	5.5	10.5	14.5	0.8	K6A2J223*****
0.027	6.5	11.0	14.5	0.8	K6A2J273*****
0.033	5.5	10.0	20.0	0.8	K6A2J333*****
0.039	6.0	10.5	20.0	0.8	K6A2J393*****
0.047	6.0	11.5	20.0	0.8	K6A2J473*****
0.056	6.5	12.0	20.0	0.8	K6A2J563*****
0.068	6.5	13.5	20.0	0.8	K6A2J683*****
0.082	7.0	14.5	20.0	0.8	K6A2J823*****
0.10	6.5	13.5	27.5	0.8	K6A2J104*****
0.12	7.0	14.5	27.5	0.8	K6A2J124*****
0.15	7.0	17.0	27.5	0.8	K6A2J154*****
0.18	7.5	18.5	27.5	0.8	K6A2J184*****
0.22	8.5	19.0	27.5	0.8	K6A2J224*****
0.27	9.5	20.0	27.5	0.8	K6A2J274*****
0.33	8.5	19.0	33.0	0.8	K6A2J334*****
0.39	9.0	19.5	33.0	0.8	K6A2J394*****
0.47	10.5	21.0	33.0	0.8	K6A2J474*****
0.56	11.0	22.0	33.0	0.8	K6A2J564*****
0.68	12.5	23.0	33.0	1.0	K6A2J684*****
0.82	13.5	24.5	33.0	1.0	K6A2J824*****
1.0	12.5	23.5	42.0	1.0	K6A2J105*****
1.2	14.0	25.0	42.0	1.0	K6A2J125*****
1.5	16.0	27.0	42.0	1.0	K6A2J155*****
1.8	17.5	28.5	42.0	1.0	K6A2J185*****
2.2	19.5	30.5	42.0	1.0	K6A2J225*****
2.7	18.0	29.0	56.0	1.0	K6A2J275*****
3.3	20.0	31.0	56.0	1.0	K6A2J335*****

备注：1. “\*\*\*\*\*” = Capacitance tolerance code, Pitch, Lead form and packaging code, Lead type, Lead length, Internal code.  
 “\*\*\*\*\*” 表示容量偏差，引线脚距，引线加工和包装代码，引线类型，引线长度，内部编码。

2. Customization for special specification and requirement is available.

**CBB20A series / Metallized polyester film capacitor (Axial type)**

**Electrical Specification & Part Numbers Reference 规格型号参考 (mm)**

Cap (μF)	1000VDC (350VAC)				Part Number
	T	H	L	d	
0.0010	4.0	8.0	12.0	0.6	K6A3A102*****
0.0012	4.0	8.0	12.0	0.6	K6A3A122*****
0.0015	4.0	8.0	12.0	0.6	K6A3A152*****
0.0018	4.5	8.5	12.0	0.6	K6A3A182*****
0.0022	4.5	8.5	12.0	0.6	K6A3A222*****
0.0027	4.5	8.5	12.0	0.6	K6A3A272*****
0.0033	4.5	8.5	12.0	0.6	K6A3A332*****
0.0039	5.0	9.0	14.5	0.6	K6A3A392*****
0.0047	5.5	9.5	14.5	0.6	K6A3A472*****
0.0056	5.5	9.5	14.5	0.6	K6A3A562*****
0.0068	5.5	9.5	14.5	0.6	K6A3A682*****
0.0082	5.5	10.0	14.5	0.8	K6A3A822*****
0.010	6.0	10.5	14.5	0.8	K6A3A103*****
0.012	6.5	11.0	14.5	0.8	K6A3A123*****
0.015	7.5	12.0	14.5	0.8	K6A3A153*****
0.018	5.5	10.0	20.0	0.8	K6A3A183*****
0.022	5.5	13.5	20.0	0.8	K6A3A223*****
0.027	6.5	14.5	20.0	0.8	K6A3A273*****
0.033	7.5	14.5	20.0	0.8	K6A3A333*****
0.039	8.0	15.0	20.0	0.8	K6A3A393*****
0.047	8.5	16.0	20.0	0.8	K6A3A473*****
0.056	7.5	15.0	27.5	0.8	K6A3A563*****
0.068	7.5	18.0	27.5	0.8	K6A3A683*****
0.082	8.0	19.0	27.5	0.8	K6A3A823*****
0.10	9.0	20.5	27.5	0.8	K6A3A104*****
0.12	10.0	21.5	27.5	0.8	K6A3A124*****
0.15	9.0	20.5	33.0	0.8	K6A3A154*****
0.18	10.0	21.5	33.0	0.8	K6A3A184*****
0.22	11.0	22.5	33.0	0.8	K6A3A224*****
0.27	13.0	24.0	33.0	0.8	K6A3A274*****
0.33	14.5	25.0	33.0	1.0	K6A3A334*****
0.39	16.0	26.5	33.0	1.0	K6A3A394*****
0.47	14.0	25.0	42.0	1.0	K6A3A474*****
0.56	15.5	26.5	42.0	1.0	K6A3A564*****
0.68	17.0	28.0	42.0	1.0	K6A3A684*****
0.82	19.0	30.0	42.0	1.0	K6A3A824*****
1.0	18.5	29.0	56.0	1.0	K6A3A105*****
1.2	20.0	30.5	56.0	1.0	K6A3A125*****
1.5	23.0	33.0	56.0	1.0	K6A3A155*****

Cap (μF)	1250VDC (400VAC)				Part Number
	T	H	L	d	
0.0010	4.5	8.5	12.0	0.6	K6A3B102*****
0.0012	4.5	8.5	12.0	0.6	K6A3B122*****
0.0015	4.5	8.5	12.0	0.6	K6A3B152*****
0.0018	4.5	8.5	12.0	0.6	K6A3B182*****
0.0022	4.5	8.5	12.0	0.6	K6A3B222*****
0.0027	5.0	9.5	14.5	0.6	K6A3B272*****
0.0033	5.0	9.5	14.5	0.6	K6A3B332*****
0.0039	5.0	9.5	14.5	0.6	K6A3B392*****
0.0047	5.0	9.5	14.5	0.6	K6A3B472*****
0.0056	5.5	10.0	14.5	0.8	K6A3B562*****
0.0068	6.0	10.5	14.5	0.8	K6A3B682*****
0.0082	6.5	11.0	14.5	0.8	K6A3B822*****
0.010	8.0	12.5	14.5	0.8	K6A3B103*****
0.012	5.0	12.5	20.0	0.8	K6A3B123*****
0.015	6.0	13.0	20.0	0.8	K6A3B153*****
0.018	6.5	13.5	20.0	0.8	K6A3B183*****
0.022	6.5	17.0	20.0	0.8	K6A3B223*****
0.027	7.5	18.0	20.0	0.8	K6A3B273*****
0.033	8.0	18.5	20.0	0.8	K6A3B333*****
0.039	7.0	18.0	27.5	0.8	K6A3B393*****
0.047	8.5	19.0	27.5	0.8	K6A3B473*****
0.056	9.0	20.0	27.5	0.8	K6A3B563*****
0.068	9.5	20.5	27.5	0.8	K6A3B683*****
0.082	10.5	21.5	27.5	0.8	K6A3B823*****
0.10	11.5	23.0	27.5	0.8	K6A3B104*****
0.12	10.5	21.5	33.0	0.8	K6A3B124*****
0.15	11.5	23.0	33.0	0.8	K6A3B154*****
0.18	12.5	24.0	33.0	0.8	K6A3B184*****
0.22	15.0	26.0	33.0	1.0	K6A3B224*****
0.27	16.0	27.5	33.0	1.0	K6A3B274*****
0.33	15.0	25.5	42.0	1.0	K6A3B334*****
0.39	06.5	27.0	42.0	1.0	K6A3B394*****
0.47	18.0	29.0	42.0	1.0	K6A3B474*****
0.56	19.5	30.5	42.0	1.0	K6A3B564*****
0.68	17.5	31.5	56.0	1.0	K6A3B684*****
0.82	19.5	33.5	56.0	1.0	K6A3B824*****
1.0	22.0	36.0	56.0	1.0	K6A3B105*****
1.2	24.5	38.0	56.0	1.0	K6A3B125*****
1.5	27.5	41.5	56.0	1.0	K6A3B155*****

备注：1. "\*\*\*\*\*" = capacitance tolerance code, Pitch, Lead form and packaging code, Lead form and Lead diameter.  
 "\*\*\*\*\*" 表示容量偏差，引线脚距，引线加工和包装代码，引线加工脚距，引线线径。  
 2. Customization for special specification and requirement is available.