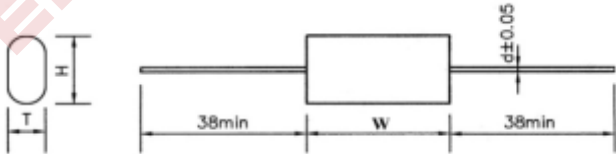


W33 CBB20A series

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

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

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

Typical application

- Temperature compensation circuits
- Time, 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	40/105/21							
额定温度 Rated temperature	85℃							
工作温度范围 Operating temperature	-40℃~105℃ (+85℃ to +105℃: decreasing factor 1.25% per °C for VR(dc))							
额定电压 Rated Voltage	100V/160V, 250V, 400V, 630V, 1000V,1250V							
电容量范围 Capacitance Range	0.0010 ~ 15μF							
电容量偏差 Capacitance Tolerance	±5%(J), ±10% (K), ±20% (M)							
耐电压 Voltage Proof	1.6UR (5s)							
损耗角正切 Dissipation Factor	≤10×10-4(20℃, 1kHz)							
绝缘电阻 Insulation Resistance	≥50 000MΩ, CR≤0.33μF ≥15 000s, CR>0.33μF (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 UR 低，电容器可工作在更高的 dv/dt 场合。这样 dv/dt 允许值为右表值乘 UR/U。	UR(V)	dv/dt (V/μs)						
		L=12	L=15	L=19	L=27	L=32	L=42	L=56
	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

W33 CBB20A series

产品代码说明 Part number system

■ 18 位产品代码说明如下：

The 18 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

W 3 3

第 1~3 位：型号代码

W33=CBB20A

第 4~5 位：直流额定电压

2A=100V 2C=160V 2E=250V
2G=400V 2J=630V 3A=1000V
3B=1250V

第 6~8 位：标称容量

举例：104 = 10×10^4 PF = 0.1μf

第 9 位：容量偏差

J=±5%, K=±10%, M=±20%

第 10 位：产品长度

G=12mm 1=15mm 2=19mm
4=27mm 5=32.0mm 7=42mm
B=56mm

第 11 位：引线线径

5= CP 0.5mm 6= CP 0.6mm
7= CP 0.7mm 8= CP 0.8mm
1= CU 1.0mm 9= CU 0.8mm
2= CU 0.5mm 3= CU 0.6mm
4= CU 0.7mm

第 12 位：引线加工和包装代码

L= 直脚

第 13~18 位：内部特征码

Digit 1 to 3: Series code

W33=CBB20A

Digit 4 to 5: DC rated voltage

2A=100V 2C=160V 2E=250V
2G=400V 2J=630V 3A=1000V
3B=1250V

Digit 6 to 8: Rated capacitance

For example: 104 = 10×10^4 PF = 0.1μf

Digit 9: Capacitance tolerance

J=±5%, K=±10%, M=±20%

Digit 10: Product length

G=12mm 1=15mm 2=19mm
4=27mm 5=32.0mm 7=42mm
B=56mm

Digit 11: Lead Wire diameter

5= CP 0.5mm 6= CP 0.6mm
7= CP 0.7mm 8= CP 0.8mm
1= CU 1.0mm 9= CU 0.8mm
2= CU 0.5mm 3= CU 0.6mm
4= CU 0.7mm

Digit 12: Lead form and packaging code

L= straight lead

Digit 13 to 18: Internal use

W33 CBB20A series

■ 外形尺寸 Dimensions (mm)

100Vdc(60Vac)160Vdc(90Vac)#					
Cn (μF)	T max	H max	L max	d	Part number
0.022	4.0	8.0	12.0	0.6	W332A223-G6*****
0.027	4.0	8.0	12.0	0.6	W332A273-G6*****
0.033	4.0	8.0	12.0	0.6	W332A333-G6*****
0.039	4.0	8.0	12.0	0.6	W332A393-G6*****
0.047	4.0	8.0	12.0	0.6	W332A473-G6*****
0.056	4.0	8.0	12.0	0.6	W332A563-G6*****
0.068	4.5	8.5	12.0	0.6	W332A683-G6*****
0.082	4.5	9.0	15.0	0.6	W332A823-16*****
0.10	4.5	9.0	15.0	0.6	W332A104-16*****
0.12	4.5	9.0	15.0	0.6	W332A124-16*****
0.15	5.0	9.5	15.0	0.6	W332A154-16*****
0.18	5.5	10.0	15.0	0.8	W332A184-18*****
0.22	6.0	11.0	15.0	0.8	W332A224-18*****
0.27	6.5	11.5	15.0	0.8	W332A274-18*****
0.33	5.0	10.5	19.0	0.8	W332A334-28*****
0.39	5.5	11.5	19.0	0.8	W332A394-28*****
0.47	5.5	13.0	19.0	0.8	W332A474-28*****
0.56	6.0	13.5	19.0	0.8	W332A564-28*****
0.68	6.0	13.0	27.0	0.8	W332A684-48*****
0.82	6.5	14.0	27.0	0.8	W332A824-48*****
1.0	6.5	16.5	27.0	0.8	W332A105-48*****
1.2	7.0	17.5	27.0	0.8	W332A125-48*****
1.5	8.0	18.5	27.0	0.8	W332A155-48*****
1.8	9.0	19.5	27.0	0.8	W332A185-48*****
2.2	8.5	18.5	32.0	0.8	W332A225-58*****
2.7	9.5	19.5	32.0	0.8	W332A275-58*****
3.3	10.5	20.5	32.0	0.8	W332A335-58*****
3.9	11.5	21.5	32.0	0.8	W332A395-58*****
4.7	12.5	23.0	32.0	1.0	W332A475-5C*****
5.6	13.5	24.0	32.0	1.0	W332A565-5C*****
6.8	12.5	23.0	42.0	1.0	W332A685-7C*****
8.2	14.0	24.5	42.0	1.0	W332A825-7C*****
10.0	15.5	26.5	42.0	1.0	W332A106-7C*****
12.0	14.5	25.0	56.0	1.0	W332A126-BC*****
15.0	16.5	27.0	56.0	1.0	W332A156-BC*****

250Vdc(160Vac)					
Cn (μF)	T max	H max	L max	d	Part number
0.010	4.0	8.0	12.0	0.6	W332E103-G6*****
0.012	4.0	8.0	12.0	0.6	W332E123-G6*****
0.015	4.0	8.0	12.0	0.6	W332E153-G6*****
0.018	4.0	8.0	12.0	0.6	W332E183-G6*****
0.022	4.0	8.0	12.0	0.6	W332E223-G6*****
0.027	4.0	8.0	12.0	0.6	W332E273-G6*****
0.033	4.5	8.5	12.0	0.6	W332E333-G6*****
0.039	4.5	8.5	15.0	0.6	W332E393-16*****
0.047	4.5	9.0	15.0	0.6	W332E473-16*****
0.056	5.0	9.5	15.0	0.6	W332E563-16*****
0.068	5.5	9.5	15.0	0.6	W332E683-16*****
0.082	5.5	9.5	15.0	0.6	W332E823-16*****
0.10	5.5	9.5	15.0	0.8	W332E104-18*****
0.12	5.5	9.5	15.0	0.8	W332E124-18*****
0.15	5.5	9.5	15.0	0.8	W332E154-18*****
0.18	5.5	10.0	15.0	0.8	W332E184-18*****
0.22	4.5	9.5	19.0	0.8	W332E224-28*****
0.27	5.0	9.5	19.0	0.8	W332E274-28*****
0.33	5.5	10.0	19.0	0.8	W332E334-28*****
0.39	5.5	11.0	19.0	0.8	W332E394-28*****
0.47	5.5	12.5	27.0	0.8	W332E474-48*****
0.56	5.0	11.0	27.0	0.8	W332E564-48*****
0.68	5.5	13.0	27.0	0.8	W332E684-48*****
0.82	6.5	13.5	27.0	0.8	W332E824-48*****
1.0	6.5	16.5	27.0	0.8	W332E105-48*****
1.2	7.0	17.0	27.0	0.8	W332E125-48*****
1.5	6.5	17.0	32.0	0.8	W332E155-58*****
1.8	7.0	17.5	32.0	0.8	W332E185-58*****
2.2	8.0	18.5	32.0	0.8	W332E225-58*****
2.7	9.0	19.5	32.0	1.0	W332E275-5C*****
3.3	10.0	20.5	32.0	1.0	W332E335-5C*****
3.9	11.0	21.5	32.0	1.0	W332E395-5C*****
4.7	10.0	20.5	42.0	1.0	W332E475-7C*****
5.6	11.0	21.5	42.0	1.0	W332E565-7C*****
6.8	12.0	23.0	42.0	1.0	W332E685-7C*****
8.2	13.5	24.5	42.0	1.0	W332E825-7C*****
10.0	13.0	24.0	56.0	1.0	W332E106-BC*****
12.0	15.0	25.0	56.0	1.0	W332E126-BC*****
15.0	17.0	27.0	56.0	1.0	W332E156-BC*****

备注：1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%

2. 第12位表示引线加工和包装代码，L=直脚 straight lead

3. “#”当额定电压是160VDC时，第4~5位代码是2C。“#”when the rated voltage is 160Vdc, the digit 4~5 is 2C.

W33 CBB20A series

■ 外形尺寸 Dimensions (mm)

400Vdc (200Vac)					
Cn (μ F)	T max	H max	L max	d	Part number
0.0068	4.0	8.0	12.0	0.6	W332G682-G6*****
0.0082	4.0	8.0	12.0	0.6	W332G822-G6*****
0.010	4.0	8.0	12.0	0.6	W332G103-G6*****
0.012	4.0	8.0	12.0	0.6	W332G123-G6*****
0.015	4.0	8.0	12.0	0.6	W332G153-G6*****
0.018	4.0	8.0	12.0	0.6	W332G183-G6*****
0.022	4.0	8.0	12.0	0.6	W332G223-G6*****
0.027	4.5	8.5	15.0	0.6	W332G273-16*****
0.033	5.0	9.5	15.0	0.6	W332G333-16*****
0.039	5.0	9.5	15.0	0.6	W332G393-16*****
0.047	5.0	9.5	15.0	0.6	W332G473-16*****
0.056	5.0	9.5	15.0	0.6	W332G563-16*****
0.068	5.5	10.0	15.0	0.8	W332G683-18*****
0.082	6.0	10.5	15.0	0.8	W332G823-18*****
0.10	5.0	9.5	19.0	0.8	W332G104-28*****
0.12	5.5	10.0	19.0	0.8	W332G124-28*****
0.15	6.0	10.5	19.0	0.8	W332G154-28*****
0.18	6.5	11.5	19.0	0.8	W332G184-28*****
0.22	7.5	12.5	19.0	0.8	W332G224-28*****
0.27	8.0	13.5	19.0	0.8	W332G274-28*****
0.33	7.0	14.0	27.0	0.8	W332G334-48*****
0.39	7.5	14.5	27.0	0.8	W332G394-48*****
0.47	8.0	15.0	27.0	0.8	W332G474-48*****
0.56	7.5	18.0	27.0	0.8	W332G564-48*****
0.68	8.5	19.0	27.0	0.8	W332G684-48*****
0.82	9.5	20.0	27.0	0.8	W332G824-48*****
1.0	8.5	19.0	32.0	0.8	W332G105-58*****
1.2	9.5	20.0	32.0	0.8	W332G125-58*****
1.5	10.5	21.0	32.0	0.8	W332G155-58*****
1.8	11.5	22.0	32.0	1.0	W332G185-5C*****
2.2	13.0	23.5	32.0	1.0	W332G225-5C*****
2.7	14.5	25.0	32.0	1.0	W332G275-5C*****
3.3	14.0	24.0	42.0	1.0	W332G335-7C*****
3.9	15.0	26.0	42.0	1.0	W332G395-7C*****
4.7	16.5	27.5	42.0	1.0	W332G475-7C*****
5.6	18.5	29.0	42.0	1.0	W332G565-7C*****
6.8	17.0	27.5	56.0	1.0	W332G685-BC*****
8.2	19.0	29.5	56.0	1.0	W332G825-BC*****
10.0	21.0	31.5	56.0	1.0	W332G106-BC*****

630Vdc (220Vac)@					
Cn (μ F)	T max	H max	L max	d	Part number
0.0010	4.0	8.0	12.0	0.6	W332J102-G6*****
0.0012	4.0	8.0	12.0	0.6	W332J122-G6*****
0.0015	4.0	8.0	12.0	0.6	W332J152-G6*****
0.0018	4.0	8.0	12.0	0.6	W332J182-G6*****
0.0022	4.0	8.0	12.0	0.6	W332J222-G6*****
0.0027	4.0	8.0	12.0	0.6	W332J272-G6*****
0.0033	4.0	8.0	12.0	0.6	W332J332-G6*****
0.0039	4.0	8.0	12.0	0.6	W332J392-G6*****
0.0047	4.0	8.0	12.0	0.6	W332J472-G6*****
0.0056	4.0	8.0	12.0	0.6	W332J562-G6*****
0.0068	4.5	8.5	12.0	0.6	W332J682-G6*****
0.0082	4.5	9.0	15.0	0.6	W332J822-16*****
0.010	5.0	9.5	15.0	0.6	W332J103-16*****
0.012	5.5	10.0	15.0	0.6	W332J123-16*****
0.015	5.5	10.0	15.0	0.6	W332J153-16*****
0.018	5.5	10.0	15.0	0.6	W332J183-16*****
0.022	5.5	10.5	15.0	0.8	W332J223-18*****
0.027	6.5	11.0	15.0	0.8	W332J273-18*****
0.033	5.5	10.0	19.0	0.8	W332J333-28*****
0.039	6.0	10.5	19.0	0.8	W332J393-28*****
0.047	6.0	11.5	19.0	0.8	W332J473-28*****
0.056	6.5	12.0	19.0	0.8	W332J563-28*****
0.068	6.5	13.5	19.0	0.8	W332J683-28*****
0.082	7.0	14.5	19.0	0.8	W332J823-28*****
0.10	6.5	13.5	27.0	0.8	W332J104-48*****
0.12	7.0	14.5	27.0	0.8	W332J124-48*****
0.15	7.0	17.0	27.0	0.8	W332J154-48*****
0.18	7.5	18.5	27.0	0.8	W332J184-48*****
0.22	8.5	19.0	27.0	0.8	W332J224-48*****
0.27	9.5	20.0	27.0	0.8	W332J274-48*****
0.33	8.5	19.0	32.0	0.8	W332J334-58*****
0.39	9.0	19.5	32.0	0.8	W332J394-58*****
0.47	10.5	21.0	32.0	0.8	W332J474-58*****
0.56	11.0	22.0	32.0	0.8	W332J564-58*****
0.68	12.5	23.0	32.0	1.0	W332J684-5C*****
0.82	13.5	24.5	32.0	1.0	W332J824-5C*****
1.0	12.5	23.5	42.0	1.0	W332J105-7C*****
1.2	14.0	25.0	42.0	1.0	W332J125-7C*****
1.5	16.0	27.0	42.0	1.0	W332J155-7C*****
1.8	17.5	28.5	42.0	1.0	W332J185-7C*****
2.2	19.5	30.5	42.0	1.0	W332J225-7C*****
2.7	18.0	29.0	56.0	1.0	W332J275-BC*****
3.3	20.0	31.0	56.0	1.0	W332J335-BC*****

备注：1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%

2. 第 12 位表示引线加工和包装代码, L= 直脚 straight lead

3. “@”不适用跨线电路应用 Not suitable for across-the-line applications.

W33 CBB20A series

■ 外形尺寸 Dimensions (mm)

1000Vdc (350Vac)					
Cn (μ F)	T max	H max	L max	d	Part number
0.0010	4.0	8.0	12.0	0.6	W333A102-G6*****
0.0012	4.0	8.0	12.0	0.6	W333A122-G6*****
0.0015	4.0	8.0	12.0	0.6	W333A152-G6*****
0.0018	4.5	8.5	12.0	0.6	W333A182-G6*****
0.0022	4.5	8.5	12.0	0.6	W333A222-G6*****
0.0027	4.5	8.5	12.0	0.6	W333A272-G6*****
0.0033	4.5	8.5	12.0	0.6	W333A332-G6*****
0.0039	5.0	9.0	15.0	0.6	W333A392-16*****
0.0047	5.5	9.5	15.0	0.6	W333A472-16*****
0.0056	5.5	9.5	15.0	0.6	W333A562-16*****
0.0068	5.5	9.5	15.0	0.6	W333A682-16*****
0.0082	5.5	10.0	15.0	0.8	W333A822-18*****
0.010	6.0	10.5	15.0	0.8	W333A103-18*****
0.012	6.5	11.0	15.0	0.8	W333A123-18*****
0.015	7.5	12.0	15.0	0.8	W333A153-18*****
0.018	5.5	10.0	19.0	0.8	W333A183-28*****
0.022	5.5	13.5	19.0	0.8	W333A223-28*****
0.027	6.5	14.5	19.0	0.8	W333A273-28*****
0.033	7.5	14.5	19.0	0.8	W333A333-28*****
0.039	8.0	15.0	19.0	0.8	W333A393-28*****
0.047	8.5	16.0	19.0	0.8	W333A473-28*****
0.056	7.5	15.0	27.0	0.8	W333A563-48*****
0.068	7.5	18.0	27.0	0.8	W333A683-48*****
0.082	8.0	19.0	27.0	0.8	W333A823-48*****
0.10	9.0	20.5	27.0	0.8	W333A104-48*****
0.12	10.0	21.5	27.0	0.8	W333A124-48*****
0.15	9.0	20.5	32.0	0.8	W333A154-58*****
0.18	10.0	21.5	32.0	0.8	W333A184-58*****
0.22	11.0	22.5	32.0	0.8	W333A224-58*****
0.27	13.0	24.0	32.0	0.8	W333A274-58*****
0.33	14.5	25.5	32.0	1.0	W333A334-5C*****
0.39	16.0	26.5	32.0	1.0	W333A394-5C*****
0.47	14.0	25.0	42.0	1.0	W333A474-7C*****
0.56	15.5	26.5	42.0	1.0	W333A564-7C*****
0.68	17.0	28.0	42.0	1.0	W333A684-7C*****
0.82	19.0	30.0	42.0	1.0	W333A824-7C*****
1.0	18.5	29.0	56.0	1.0	W333A105-BC*****
1.2	20.0	30.5	56.0	1.0	W333A125-BC*****
1.5	23.0	33.0	56.0	1.0	W333A155-BC*****

1250Vdc (400Vac)					
Cn (μ F)	T max	H max	L max	d	Part number
0.0010	4.5	8.5	12.0	0.6	W333B102-G6*****
0.0012	4.5	8.5	12.0	0.6	W333B122-G6*****
0.0015	4.5	8.5	12.0	0.6	W333B152-G6*****
0.0018	4.5	8.5	12.0	0.6	W333B182-G6*****
0.0022	4.5	8.5	12.0	0.6	W333B222-G6*****
0.0027	5.0	9.5	15.0	0.6	W333B272-16*****
0.0033	5.0	9.5	15.0	0.6	W333B332-16*****
0.0039	5.0	9.5	15.0	0.6	W333B392-16*****
0.0047	5.0	9.5	15.0	0.6	W333B472-16*****
0.0056	5.5	10.0	15.0	0.8	W333B562-18*****
0.0068	6.0	10.5	15.0	0.8	W333B682-18*****
0.0082	6.5	11.0	15.0	0.8	W333B822-18*****
0.010	8.0	12.5	15.0	0.8	W333B103-18*****
0.012	5.5	12.5	19.0	0.8	W333B123-28*****
0.015	6.0	13.0	19.0	0.8	W333B153-28*****
0.018	6.5	13.5	19.0	0.8	W333B183-28*****
0.022	6.5	17.0	19.0	0.8	W333B223-28*****
0.027	7.5	18.0	19.0	0.8	W333B273-28*****
0.033	8.0	18.5	19.0	0.8	W333B333-28*****
0.039	7.0	18.0	27.0	0.8	W333B393-48*****
0.047	8.5	19.0	27.0	0.8	W333B473-48*****
0.056	9.0	20.0	27.0	0.8	W333B563-48*****
0.068	9.5	20.5	27.0	0.8	W333B683-48*****
0.082	10.5	21.5	27.0	0.8	W333B823-48*****
0.10	11.5	23.0	27.0	0.8	W333B104-48*****
0.12	10.5	21.5	32.0	0.8	W333B124-58*****
0.15	11.5	23.0	32.0	0.8	W333B154-58*****
0.18	12.5	24.0	32.0	0.8	W333B184-58*****
0.22	15.0	26.0	32.0	1.0	W333B224-5C*****
0.27	16.5	27.5	32.0	1.0	W333B274-5C*****
0.33	15.0	25.5	42.0	1.0	W333B334-7C*****
0.39	16.5	27.0	42.0	1.0	W333B394-7C*****
0.47	18.0	29.0	42.0	1.0	W333B474-7C*****
0.56	19.5	30.5	42.0	1.0	W333B564-7C*****
0.68	17.5	31.5	56.0	1.0	W333B684-BC*****
0.82	19.5	33.5	56.0	1.0	W333B824-BC*****
1.0	22.0	36.0	56.0	1.0	W333B105-BC*****
1.2	24.5	38.0	56.0	1.0	W333B125-BC*****
1.5	27.5	41.5	56.0	1.0	W333B155-BC*****

备注：1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%

2. 第12位表示引线加工和包装代码，L=直脚 straight lead