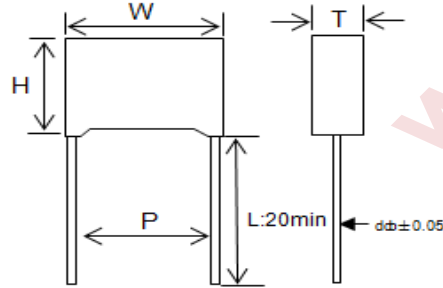


# W48 CBB21B(E) series

电容降压专用金属化聚丙烯膜交流电容器  
Metallized polypropylene film A.C.capacitor for capacitive divider

## ■ 外形图 Outline Drawing



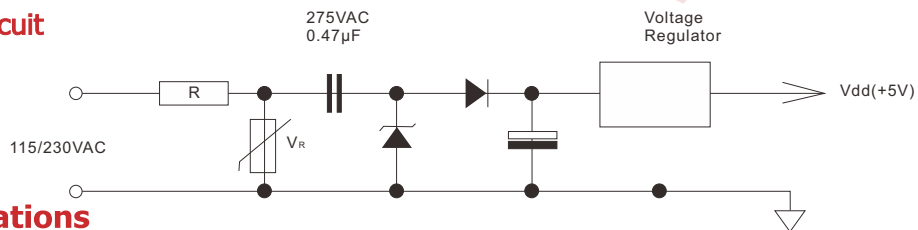
## ■ 特点

- 专门设计用于与电源串联的电容降压电路场合，如电表、LED 驱动模块等。
- 金属化聚丙烯膜结构
- 自愈性能优异，能承受过电压冲击
- 长期负载下优异的电容容量稳定性
- 优异的防潮性能
- 优异的阻燃性能

## ■ Features

- This is specifically designed for applications in serial with the main, i.e.: capacitive divider, for example, energy meter, LED driver etc.
- Metallized polypropylene
- Good self-healing properties, withstanding surge voltage stressing
- Long stability of capacitance
- Good properties in damp environment
- Excellent active and passive flame resistant abilities

## ■ 典型电路 Typical circuit



## ■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 14579 (IEC 60384-17)		
气候类别 Climatic Category	55/105/56		
额定温度 Rated temperature	85℃		
工作温度范围 Operating temperature	-55℃~+105℃ (+85℃ to +105℃: decreasing factor 1.25% per ℃ for VR(dc))		
额定电压 Rated Voltage	230Vac	250Vac	275VAC/300Vac
最大连续直流电压 Maximum continuous DC voltage	400Vdc	560Vdc	630Vdc
电容量范围 Capacitance Range	0.33µF ~ 4.7µF	0.010µF ~ 4.0µF	0.010µF ~ 2.2µF
耐电压 Voltage Proof	640Vdc(2s)	900Vdc(2s)	1500Vdc(2s)
电容量偏差 Capacitance Tolerance	±5%(J), ±10%(K), ±20%(M)		
损耗角正切 Dissipation Factor	≤0.1% (20℃, 1kHz)		
绝缘电阻 Insulation Resistance	≥15 000MΩ, C <sub>R</sub> ≤0.33µF ≥5 000s, C <sub>R</sub> >0.33µF (20℃, 100V, 1min)		

备注：长寿命要求和连续工作请选用 275Vac 及以上电压。

Note: For long lifetime and continuous working, please choose 275Vac and upwards voltage

# W48 CBB21B(E) 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 4 8

第 1~3 位：型号代码

W48=CBB21B ( E )

第 4~5 位：交流额定电压

L2=230V E2=250V P2=275V  
Q1=300V

第 6~8 位：标称容量

举例：104 =  $10 \times 10^4$  PF = 0.1 $\mu$ f

第 9 位：容量偏差

J=±5%, K=±10%, M=±20%

第 10 位：引线脚距

M=15.0mm P=22.0mm  
S=27.0mm

第 11 位：引线线径

6= CP 0.6mm 8= CP 0.8mm

第 12 位：引线加工和包装代码

L= 直脚 K= 引线成型  
T= 弹带包装

第 13~18 位：内部特征码

Digit 1 to 3: Series code

W48=CBB21B(E)

Digit 4 to 5: AC rated voltage

L2=230V E2=250V P2=275V  
Q1=300V

Digit 6 to 8: Rated capacitance

For example: 104 =  $10 \times 10^4$  PF = 0.1 $\mu$ f

Digit 9: Capacitance tolerance

J=±5%, K=±10%, M=±20%

Digit 10: Pitch

M=15.0mm P=22.0mm  
S=27.0mm

Digit 11: Lead Wire diameter

6= CP 0.6mm 8= CP 0.8mm

Digit 12: Lead form and packaging code

L= straight lead K= Lead kinked  
T= ammo-pack

Digit 13 to 18: Internal use

# W48 CBB21B(E) series

## ■ 外形尺寸 Dimensions (mm)

230Vac						
Cn (μF)	W max	H max	T max	P	d	Part number
0.033	10.5	11.0	5.0	7.5	0.6	W48L2333-J6*****
0.047	10.5	12.0	6.0	7.5	0.6	W48L2473-J6*****
0.033	13.0	9.0	4.0	10.0	0.6	W48L2333-K6*****
0.047	13.0	11.0	5.0	10.0	0.6	W48L2473-K6*****
0.068	13.0	12.0	6.0	10.0	0.6	W48L2683-K6*****
0.10	13.0	12.0	6.0	10.0	0.6	W48L2104-K6*****
0.10	17.5	11.0	5.0	15.0	0.6	W48L2104-M6*****
0.15	17.5	12.0	6.0	15.0	0.6	W48L2154-M6*****
0.22	17.5	13.5	7.5	15.0	0.6	W48L2224-M6*****
0.33	17.5	14.5	8.5	15.0	0.6	W48L2334-M6*****
0.47	17.5	16.0	10.0	15.0	0.8	W48L2474-M8*****
0.33	26.5	15.0	6.0	22.0	0.8	W48L2334-P8*****
0.47	26.5	16.0	7.0	22.0	0.8	W48L2474-P8*****
0.56	26.5	17.0	8.5	22.0	0.8	W48L2564-P8*****
0.68	26.5	17.0	8.5	22.0	0.8	W48L2684-P8*****
0.82	26.5	18.5	10.0	22.0	0.8	W48L2824-P8*****
1.0	26.5	20.0	11.0	22.0	0.8	W48L2105-P8*****
1.2	26.5	20.0	11.0	22.0	0.8	W48L2125-P8*****
1.5	26.5	22.0	12.0	22.0	0.8	W48L2155-P8*****
0.47	32.0	18.0	9.0	27.0	0.8	W48L2474-S8*****
0.56	32.0	18.0	9.0	27.0	0.8	W48L2564-S8*****
0.68	32.0	18.0	9.0	27.0	0.8	W48L2684-S8*****
1.0	32.0	18.0	9.0	27.0	0.8	W48L2105-S8*****
1.2	32.0	20.0	11.0	27.0	0.8	W48L2125-S8*****
1.5	32.0	20.0	11.0	27.0	0.8	W48L2155-S8*****
2.0	32.0	22.0	13.0	27.0	0.8	W48L2205-S8*****
2.2	32.0	24.5	15.0	27.0	0.8	W48L2225-S8*****
3.0	32.0	33.0	18.0	27.0	0.8	W48L2305-S8*****
3.3	32.0	33.0	18.0	27.0	0.8	W48L2335-S8*****
4.0	32.0	33.0	18.0	27.0	0.8	W48L2405-S8*****
4.7	32.0	37.0	22.0	27.0	0.8	W48L2475-S8*****

250Vac						
Cn (μF)	W max	H max	T max	P	d	Part number
0.010	13.0	9.0	4.0	10.0	0.6	W48E2103-K6*****
0.015	13.0	9.0	4.0	10.0	0.6	W48E2153-K6*****
0.022	13.0	9.0	4.0	10.0	0.6	W48E2223-K6*****
0.033	13.0	11.0	5.0	10.0	0.6	W48E2333-K6*****
0.047	13.0	11.0	5.0	10.0	0.6	W48E2473-K6*****
0.068	13.0	12.0	6.0	10.0	0.6	W48E2683-K6*****
0.068	17.5	11.0	5.0	15.0	0.6	W48E2683-M6*****
0.10	17.5	12.0	6.0	15.0	0.6	W48E2104-M6*****
0.15	17.5	13.5	7.5	15.0	0.6	W48E2154-M6*****
0.22	17.5	14.5	8.5	15.0	0.6	W48E2224-M6*****
0.33	17.5	16.0	10.0	15.0	0.8	W48E2334-M8*****
0.22	26.5	15.0	6.0	22.0	0.8	W48E2224-P8*****
0.33	26.5	16.0	7.0	22.0	0.8	W48E2334-P8*****
0.39	26.5	17.0	8.5	22.0	0.8	W48E2394-P8*****
0.47	26.5	17.0	8.5	22.0	0.8	W48E2474-P8*****
0.56	26.5	18.5	10.0	22.0	0.8	W48E2564-P8*****
0.68	26.5	18.5	10.0	22.0	0.8	W48E2684-P8*****
0.82	26.5	20.0	11.0	22.0	0.8	W48E2824-P8*****
1.0	26.5	22.0	12.0	22.0	0.8	W48E2105-P8*****
1.2	26.5	24.5	15.5	22.0	0.8	W48E2125-P8*****
1.5	26.5	24.5	15.5	22.0	0.8	W48E2155-P8*****

250Vac						
Cn (μF)	W max	H max	T max	P	d	Part number
0.47	32.0	18.0	9.0	27.0	0.8	W48E2474-S8*****
0.56	32.0	18.0	9.0	27.0	0.8	W48E2564-S8*****
0.68	32.0	18.0	9.0	27.0	0.8	W48E2684-S8*****
1.0	32.0	20.0	11.0	27.0	0.8	W48E2105-S8*****
1.2	32.0	22.0	13.0	27.0	0.8	W48E2125-S8*****
1.5	32.0	25.0	13.0	27.0	0.8	W48E2155-S8*****
2.0	32.0	33.0	18.0	27.0	0.8	W48E2205-S8*****
2.2	32.0	33.0	18.0	27.0	0.8	W48E2225-S8*****
3.0	32.0	33.0	18.0	27.0	0.8	W48E2305-S8*****
3.3	32.0	33.0	18.0	27.0	0.8	W48E2335-S8*****
4.0	32.0	37.0	22.0	27.0	0.8	W48E2405-S8*****

275Vac/300Vac#						
Cn (μF)	W max	H max	T max	P	d	Part number
0.010	13.0	9.0	4.0	10.0	0.6	W48P2103-K6*****
0.015	13.0	11.0	5.0	10.0	0.6	W48P2153-K6*****
0.022	13.0	12.0	6.0	10.0	0.6	W48P2223-K6*****
0.033	13.0	12.0	6.0	10.0	0.6	W48P2333-K6*****
0.010	17.5	11.0	5.0	15.0	0.6	W48P2103-M6*****
0.015	17.5	11.0	5.0	15.0	0.6	W48P2153-M6*****
0.022	17.5	11.0	5.0	15.0	0.6	W48P2223-M6*****
0.033	17.5	11.0	5.0	15.0	0.6	W48P2333-M6*****
0.047	17.5	12.0	6.0	15.0	0.6	W48P2473-M6*****
0.068	17.5	13.5	7.5	15.0	0.6	W48P2683-M6*****
0.10	17.5	14.5	8.5	15.0	0.6	W48P2104-M6*****
0.15	17.5	16.0	10.0	15.0	0.8	W48P2154-M8*****
0.22	17.5	19.0	11.0	15.0	0.8	W48P2224-M8*****
0.068	26.5	15.0	6.0	22.0	0.8	W48P2683-P8*****
0.10	26.5	15.0	6.0	22.0	0.8	W48P2104-P8*****
0.15	26.5	16.0	7.0	22.0	0.8	W48P2154-P8*****
0.22	26.5	17.0	8.5	22.5	0.8	W48P2224-P8*****
0.33	26.5	18.5	10.0	22.5	0.8	W48P2334-P8*****
0.39	26.5	20.0	11.0	22.0	0.8	W48P2394-P8*****
0.47	26.5	22.0	12.0	22.0	0.8	W48P2474-P8*****
0.33	32.0	18.0	9.0	27.0	0.8	W48P2334-S8*****
0.22	32.0	18.0	9.0	27.0	0.8	W48P2224-S8*****
0.56	32.0	22.0	13.0	27.0	0.8	W48P2564-S8*****
0.47	32.0	20.0	11.0	27.0	0.8	W48P2474-S8*****
0.68	32.0	22.0	13.0	27.0	0.8	W48P2684-S8*****
1.0	32.0	28.0	14.0	27.0	0.8	W48P2105-S8*****
1.5	32.0	33.0	18.0	27.0	0.8	W48P2155-S8*****
2.2	32.0	37.0	22.0	27.0	0.8	W48P2225-S8*****

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 K= 引线成型 Lead kinked T= 弹带包装 ammo-pack

3. “#”当额定电压是 300Vac 时, 第 4~5 位代码是 Q1. “#”when the rated voltage is 300Vac, the digit 4~5 is Q1.