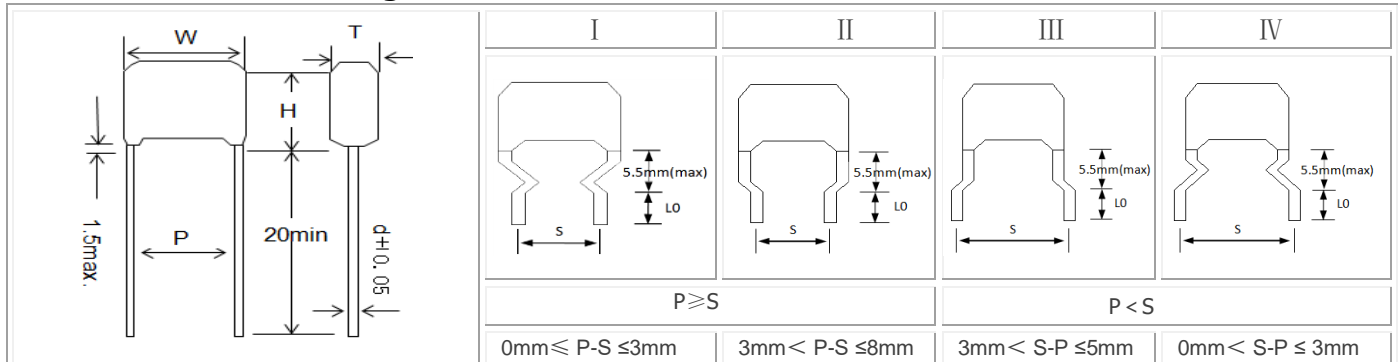


## 电容降压专用金属化聚丙烯膜交流电容器 Metallized polypropylene film A.C.capacitor for capacitive divider

### ■ 外形图 Outline Drawing



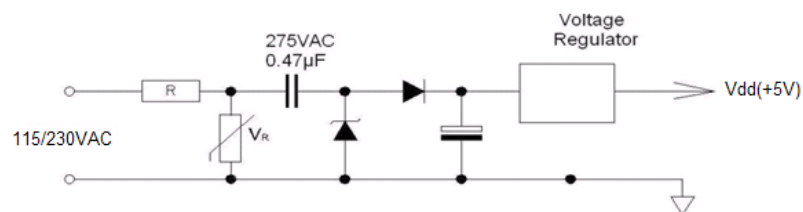
### ■ 特点

- 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
- 阻燃环氧粉末封装 (UL94/V-0)

### ■ 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
- Flame resistant epoxy resin powder coating(UL94/V-0)

### ■ 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	40/085/21		
额定温度 Rated temperature	85℃		
工作温度范围 Operating temperature	-40℃~+85℃		
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
电容容量范围 Capacitance Range	0.033µF ~ 4.7µF	0.010µF ~ 4.0µF	0.010µF ~ 2.2µF
耐电压 Voltage Proof	640Vdc(2s)	900Vdc(2s)	1500Vdc(2s)
电容容量偏差 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, CR≤0.33µF ≥5 000s, CR>0.33µF (20℃, 100V, 1min)		

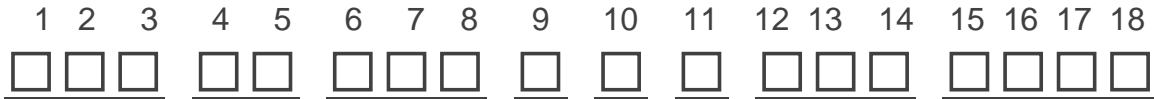
备注：长寿命要求和连续工作请选用 275Vac 及以上电压。

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

## 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:



### W 4 9

<p>第 1~3 位: 型号代码</p> <p style="padding-left: 40px;">W49=CBB21 (E)</p> <p>第 4~5 位: 交流额定电压</p> <p style="padding-left: 40px;">L2=230V E2=250V P2=275V</p> <p style="padding-left: 40px;">Q1=300V</p> <p>第 6~8 位: 标称容量</p> <p style="padding-left: 40px;">举例 : 104 = <math>10 \times 10^4</math> PF = 0.1<math>\mu</math>f</p> <p>第 9 位: 容量偏差</p> <p style="padding-left: 40px;">J=±5%, K=±10%, M=±20%</p> <p>第 10 位: 引线脚距</p> <p style="padding-left: 40px;">J=7.5mm K=10mm M=15.0mm</p> <p style="padding-left: 40px;">N=20mm P=22mm R=25mm</p> <p style="padding-left: 40px;">S=27mm</p> <p>第 11 位: 引线线径</p> <p style="padding-left: 40px;">6= CP 0.6mm 7= CP 0.7mm</p> <p style="padding-left: 40px;">8= CP 0.8mm</p> <p>第 12 位: 引线加工和包装代码</p> <p style="padding-left: 40px;">L= 直脚 K= 引线成型</p> <p style="padding-left: 40px;">T= 弹带包装</p> <p>第 13~18 位: 内部特征码</p>	<p>Digit 1 to 3: Series code</p> <p style="padding-left: 40px;">W49=CBB21 (E)</p> <p>Digit 4 to 5: AC rated voltage</p> <p style="padding-left: 40px;">L2=230V E2=250V P2=275V</p> <p style="padding-left: 40px;">Q1=300V</p> <p>Digit 6 to 8: Rated capacitance</p> <p style="padding-left: 40px;">For example: 104 = <math>10 \times 10^4</math> PF = 0.1<math>\mu</math>f</p> <p>Digit 9: Capacitance tolerance</p> <p style="padding-left: 40px;">J=±5%, K=±10%, M=±20%</p> <p>Digit 10: Pitch</p> <p style="padding-left: 40px;">J=7.5mm K=10mm M=15.0mm</p> <p style="padding-left: 40px;">N=20mm P=22mm R=25mm</p> <p style="padding-left: 40px;">S=27mm</p> <p>Digit 11: Lead Wire diameter</p> <p style="padding-left: 40px;">6= CP 0.6mm 7= CP 0.7mm</p> <p style="padding-left: 40px;">8= CP 0.8mm</p> <p>Digit 12: Lead form and packaging code</p> <p style="padding-left: 40px;">L= straight lead K= Lead kinked</p> <p style="padding-left: 40px;">T= ammo-pack</p> <p>Digit 13 to 18: Internal use</p>
---	--

## ■ 外形尺寸 Dimensions (mm)

230Vac						
Cn ( $\mu$ F)	W max	H max	T max	P	d	Part number
0.033	9.5	10.5	5.5	7.5	0.6	W49L2333-J6*****
0.047	9.5	10.5	6.5	7.5	0.6	W49L2473-J6*****
0.033	12.5	9.0	5.0	10.0	0.6	W49L2333-K6*****
0.047	12.5	10.0	5.5	10.0	0.6	W49L2473-K6*****
0.068	12.5	11.0	6.0	10.0	0.6	W49L2683-K6*****
0.10	12.5	12.0	7.0	10.0	0.6	W49L2104-K6*****
0.10	17.5	10.5	5.5	15.0	0.6	W49L2104-M6*****
0.15	17.5	11.0	6.5	15.0	0.6	W49L2154-M6*****
0.22	17.5	12.0	7.5	15.0	0.6	W49L2224-M6*****
0.33	17.5	14.5	9.0	15.0	0.6	W49L2334-M6*****
0.39	17.5	14.5	9.5	15.0	0.6	W49L2394-M6*****
0.47	17.5	15.0	10.5	15.0	0.7	W49L2474-M7*****
0.22	22.5	11.0	6.5	20.0	0.7	W49L2224-N7*****
0.33	22.5	12.5	7.5	20.0	0.7	W49L2334-N7*****
0.39	22.5	13.0	8.0	20.0	0.7	W49L2394-N7*****
0.47	22.5	14.5	8.0	20.0	0.7	W49L2474-N7*****
0.56	22.5	15.0	9.0	20.0	0.7	W49L2564-N7*****
0.68	22.5	16.0	9.5	20.0	0.7	W49L2674-N7*****
1.0	22.5	19.0	11.0	20.0	0.7	W49L2105-N7*****
0.33	25.0	13.0	6.5	22.0	0.7	W49L2334-P7*****
0.39	25.0	13.5	7.0	22.0	0.7	W49L2374-P7*****
0.47	25.0	14.0	7.5	22.5	0.7	W49L2474-P7*****
0.56	25.0	15.5	8.5	22.0	0.7	W49L2564-P7*****
0.68	25.0	15.5	9.0	22.0	0.7	W49L2674-P7*****
1.0	25.0	18.0	10.5	22.0	0.7	W49L2105-P7*****
1.5	25.0	21.5	12.5	22.0	0.7	W49L2155-P7*****
1.0	28.0	18.5	9.5	25.0	0.7	W49L2105-R7*****
1.5	28.0	20.5	11.0	25.0	0.7	W49L2155-R7*****
2.0	28.0	22.5	13.0	25.0	0.7	W49L2205-R7*****
2.2	28.0	23.0	13.5	25.0	0.7	W49L2225-R7*****
0.47	30.0	14.5	6.5	27.0	0.7	W49L2474-S7*****
0.56	30.0	15.0	7.0	27.0	0.7	W49L2564-S7*****
0.68	30.0	16.5	7.5	27.0	0.7	W49L2674-S7*****
1.0	30.0	17.0	9.0	27.0	0.7	W49L2105-S7*****
1.5	30.0	20.0	10.5	27.0	0.8	W49L2155-S8*****
2.0	30.0	24.5	11.0	27.0	0.8	W49L2205-S8*****
2.2	30.0	24.5	11.0	27.0	0.8	W49L2225-S8*****
3.0	30.0	27.5	14.0	27.0	0.8	W49L2305-S8*****
3.3	30.0	27.5	14.5	27.0	0.8	W49L2335-S8*****
4.0	30.0	29.0	16.5	27.0	0.8	W49L2405-S8*****
4.7	30.0	31.5	18.0	27.0	0.8	W49L2475-S8*****

250Vac						
Cn ( $\mu$ F)	W max	H max	T max	P	d	Part number
0.010	12.5	8.0	4.0	10.0	0.6	W49E2103-K6*****
0.015	12.5	8.0	5.0	10.0	0.6	W49E2153-K6*****
0.022	12.5	9.0	5.0	10.0	0.6	W49E2223-K6*****
0.033	12.5	10.0	5.5	10.0	0.6	W49E2333-K6*****
0.047	12.5	11.5	6.0	10.0	0.6	W49E2473-K6*****
0.068	12.5	12.5	7.0	10.0	0.6	W49E2683-K6*****
0.068	17.5	10.0	5.5	15.0	0.6	W49E2683-M6*****
0.10	17.5	11.0	6.5	15.0	0.6	W49E2104-M6*****
0.15	17.5	12.0	7.5	15.0	0.6	W49E2154-M6*****
0.22	17.5	13.5	8.5	15.0	0.6	W49E2224-M6*****
0.33	17.5	15.0	10.5	15.0	0.7	W49E2334-M7*****
0.15	22.5	11.0	6.5	20.0	0.7	W49E2154-N7*****
0.22	22.5	12.0	7.5	20.0	0.7	W49E2224-N7*****
0.33	22.5	14.5	8.0	20.0	0.7	W49E2334-N7*****
0.39	22.5	15.0	8.0	20.0	0.7	W49E2394-N7*****
0.47	22.5	16.0	9.5	20.0	0.7	W49E2474-N7*****
0.56	22.5	17.5	10.5	20.0	0.7	W49E2564-N7*****
0.68	22.5	19.5	10.0	20.0	0.7	W49E2674-N7*****
0.22	25.0	13.5	6.5	22.0	0.7	W49E2224-P7*****
0.33	25.0	14.0	7.5	22.0	0.7	W49E2334-P7*****
0.39	25.0	15.5	8.0	22.0	0.7	W49E2394-P7*****
0.47	25.0	15.0	9.0	22.0	0.7	W49E2474-P7*****
0.56	25.0	16.0	9.5	22.0	0.7	W49E2564-P7*****
0.68	25.0	18.0	10.0	22.0	0.7	W49E2674-P7*****
1.0	25.0	20.0	12.0	22.0	0.7	W49E2105-P7*****
0.33	28.0	15.5	6.0	25.0	0.7	W49E2334-R7*****
0.39	28.0	15.0	7.5	25.0	0.7	W49E2394-R7*****
0.47	28.0	16.5	8.0	25.0	0.7	W49E2474-R7*****
0.56	28.0	16.5	8.5	25.0	0.7	W49E2564-R7*****
0.68	28.0	17.0	9.5	25.0	0.7	W49E2674-R7*****
1.0	28.0	19.0	11.5	25.0	0.8	W49E2105-R8*****
1.5	28.0	25.5	12.0	25.0	0.8	W49E2155-R8*****
2.0	28.0	27.0	14.0	25.0	0.8	W49E2205-R8*****
2.2	28.0	28.5	15.0	25.0	0.8	W49E2225-R8*****
3.3	28.0	31.5	18.0	25.0	0.8	W49E2335-R8*****
0.47	30.0	15.5	7.5	27.0	0.8	W49E2474-S8*****
0.56	30.0	16.0	8.0	27.0	0.8	W49E2564-S8*****
0.68	30.0	17.5	9.0	27.0	0.8	W49E2674-S8*****
1.0	30.0	19.5	10.5	27.0	0.8	W49E2105-S8*****
1.5	30.0	24.0	11.5	27.0	0.8	W49E2155-S8*****
2.0	30.0	26.0	13.5	27.0	0.8	W49E2205-S8*****
2.2	30.0	27.5	14.0	27.0	0.8	W49E2225-S8*****
3.0	30.0	29.5	16.5	27.0	0.8	W49E2305-S8*****
3.3	30.0	30.0	17.5	27.0	0.8	W49E2335-S8*****
4.0	30.0	32.0	19.5	27.0	0.8	W49E2405-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

## ■ 外形尺寸 Dimensions (mm)

275Vac/300Vac#						
Cn ( $\mu$ F)	W max	H max	T max	P	d	Part number
0.10	17.5	14.5	9.0	15.0	0.6	W49P2104-M6*****
0.15	17.5	15.5	10.5	15.0	0.7	W49P2154-M7*****
0.22	17.5	18.5	12.0	15.0	0.7	W49P2224-M7*****
0.10	22.5	12.0	7.5	20.0	0.7	W49P2104-N7*****
0.15	22.5	14.5	9.0	20.0	0.7	W49P2154-N7*****
0.22	22.5	16.0	10.0	20.0	0.7	W49P2224-N7*****
0.33	22.5	18.0	12.0	20.0	0.7	W49P2334-N7*****
0.10	25.0	12.0	7.0	22.0	0.7	W49P2104-P7*****
0.15	25.0	13.0	8.5	22.0	0.7	W49P2154-P7*****
0.22	25.0	16.5	9.0	22.0	0.7	W49P2224-P7*****
0.33	25.0	17.5	11.0	22.0	0.7	W49P334-P7*****
0.39	25.0	19.0	11.5	22.0	0.7	W49P2394-P7*****
0.47	25.0	20.5	12.5	22.0	0.7	W49P2474-P7*****
0.22	28.0	15.0	8.5	25.0	0.7	W49P2224-R7*****
0.27	28.0	16.0	9.5	25.0	0.7	W49P2274-R7*****
0.33	28.0	17.5	10.5	25.0	0.8	W49P2334-R8*****
0.36	28.0	17.0	10.0	25.0	0.8	W49P2364-R8*****
0.39	28.0	18.5	11.0	25.0	0.8	W49P2394-R8*****
0.41	28.0	18.0	11.5	25.0	0.8	W49P2414-R8*****
0.43	28.0	18.0	11.0	25.0	0.8	W49P2434-R8*****
0.45	28.0	19.0	11.5	25.0	0.8	W49P2454-R8*****
0.47	28.0	20.5	11.5	25.0	0.8	W49P2474-R8*****
0.49	28.0	20.5	12.0	25.0	0.8	W49P2494-R8*****
0.51	28.0	20.0	12.0	25.0	0.8	W49P2514-R8*****
0.56	28.0	21.5	12.5	25.0	0.8	W49P2564-R8*****
0.68	28.0	22.0	14.0	25.0	0.8	W49P2674-R8*****
0.75	28.0	23.5	14.5	25.0	0.8	W49P2754-R8*****
0.82	28.0	24.0	14.5	25.0	0.8	W49P2724-R8*****
1.0	28.0	26.0	16.5	25.0	0.8	W49P2105-R8*****

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. "#"当额定电压时 300Vac 时, 第 4~5 位代码是 Q1。"# "when the rated voltage is 300Vac, the digit 4~5 is Q1.