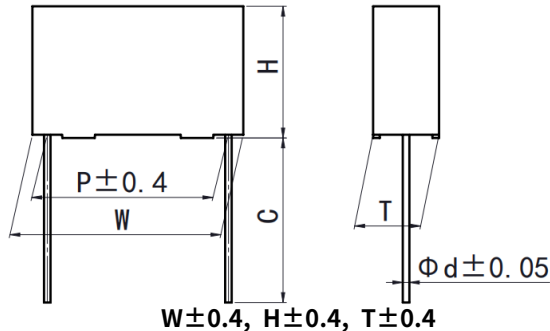


C23
CL23 series

塑料外壳金属化聚酯膜电容器 Metallized polyester film capacitor(Box-type)

外形图 Outline Drawing



特点

- 可靠性高
- 金属化酯膜, 无感卷绕结构
- 塑料外壳(UL94 V-0), 阻燃环氧填充

主要用途

- 旁路, 隔直, 耦合, 退耦
- 脉冲, 逻辑, 定时, 振荡电路

Features

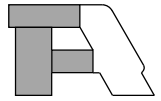
- High reliability
- Metallized polyester film, non-inductive wound construction
- Plastic case(UL94 V-0), epoxy resin sealing

Typical Applications

- By-passing, blocking, coupling, decoupling
- Pulse, logic, timing, oscillator circuits

技术要求 Specifications

引用标准 Reference Standard	GB/T 7332 (IEC 60384-2)					
气候类别 Climatic Category	55/105/56					
额定温度 Rated Temperature	85°C					
工作温度 Operating Temperature Range	-55°C~105°C (+85°C to +105°C: decreasing factor 1.25% per °C for U_R)					
额定电压 Rated Voltage	63V, 100V, 160V, 250V, 400V, 630V, 1 000V					
电容量范围 Capacitance Range	0.0010 μ F~47.0 μ F					
电容量偏差 Capacitance Tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K), $\pm 20\%$ (M)					
耐电压 Voltage Proof	1.6 U_R (5s)					
损耗角正切 Dissipation Factor	$\leq 1.0\%$ (20°C, 1kHz)					
绝缘电阻 Insulation Resistance	$U_R > 100V$	$R \geq 15\ 000M\Omega$, $C_N \leq 0.33\mu F$ (20°C, 100V, 1min) $RC_N \geq 5\ 000s$, $C_N > 0.33\mu F$				
	$U_R \leq 100V$	$R \geq 3\ 750M\Omega$, $C_N \leq 0.33\mu F$ (20°C, 10V, 1min) $RC_N \geq 1\ 250s$, $C_N > 0.33\mu F$				
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_R 低, 电容器可工作在更高的 dV/dt 场合, 这样 dV/dt 允许值应为右表值乘以 U_R/U 。 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 right value with U_R/U .	U_R (V)	dV/dt(V/ μ s)				
		P=7.5	P=10.0	P=15.0	P=22.5	P=27.5
	63	7.5	6	3	2	1
	100	15	9	5	3	2
	250	30	20	12	8	5
	400	40	30	20	10	7
630	50	40	25	12	10	
1000	70	60	30	15	12	



■ 产品编码说明 Part number system

■ 15 位产品代码如下：

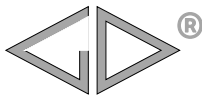
The 15 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	2	3												

第 1~3 位	型号代码 C23= CL23	Digit 1 to 3	Series code C23=CL23
第 4~5 位	直流额定电压 1J=63V 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V 3A=1000V	Digit 4 to 5	D.C. rated voltage 1J=63V 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V 3A=1000V
第 6~8 位	标称容量 举例:103=10×10 ³ pF=0.01μF	Digit 6 to 8	Rated capacitance value for example: 103=10×10 ³ pF=0.01μF
第 9 位	容量偏差 J=±5%, K=±10%, M=±20%	Digit 9	Capacitance tolerance J=±5%, K=±10%, M=±20%
第 10 位	引线脚距 P 3=7.5mm 4=10.0mm 6=15.0mm 9=22.5mm B=27.5mm	Digit 10	Pitch 3=7.5mm 4=10.0mm 6=15.0mm 9=22.5mm B=27.5mm
第 11 位	内部特征码	Digit 11	Internal use
第 12~15 位	引线加工和包装代码	Digit 12 to 15	Lead form and packaging code

■ Table 1 引线加工和包装代码 lead form and packaging code

第 12 位 Digit 12		第 13 位 Digit 13		第 14 位 Digit 14		第 15 位 Digit 15	
代码 Code	说明 explanation	代码 Code	说明 explanation	代码 Code	说明 explanation	代码 Code	说明 explanation
A	弹带包装 ammo-pack	3	F=7.5mm	0	表示直脚 straight	1	产品在连续的两个载带孔之间 each cap. among two consecutive holes P3=12.7mm, H=18.5mm (For pitch=7.5mm)
		4	F=10.0mm			5	P3=25.4mm; H=18.5mm (For pitch=10/15mm) (Detail parameter refer to page 16)
		6	F=15.0mm				
C	直脚 straight lead “C” in the figure above	代码 Code	说明 explanation	0		0	引线长度偏差 ±0.5mm Length tolerance ±0.5mm
		00	标准的引线长度(18mm~26mm) standard lead length				
		45	引线长度 4.5mm lead length 4.5mm				

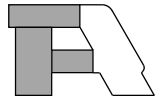


C23
CL23 series

■ 外形尺寸 Dimensions(mm)
Pattern II(Reduced sizes)

63Vdc (40Vac)							100Vdc (63Vac)							250Vdc (160Vac)						
C _N (μF)	W	H	T	P	d	Part number	C _N (μF)	W	H	T	P	d	Part number	C _N (μF)	W	H	T	P	d	Part number
0.47	10.5	8.5	3.5	7.5	0.5	C231J474-3S****	0.22	10.5	8.5	3.5	7.5	0.5	C232A224-3S****	0.068	10.5	8.5	3.5	7.5	0.5	C232E683-3S****
0.68	10.5	9.0	4.0	7.5	0.6	C231J684-3S****	0.33	10.5	9.0	4.0	7.5	0.6	C232A334-3S****	0.10	10.5	8.5	3.5	7.5	0.5	C232E104-3S****
1.0	10.5	11.0	5.0	7.5	0.6	C231J105-3S****	0.39	10.5	9.0	4.0	7.5	0.6	C232A394-3S****	0.15	10.5	9.0	4.0	7.5	0.6	C232E154-3S****
1.5	10.5	12.0	6.0	7.5	0.6	C231J155-3S****	0.47	10.5	9.0	4.0	7.5	0.6	C232A474-3S****	0.18	10.5	11.0	5.0	7.5	0.6	C232E184-3S****
1.8	10.5	12.0	6.0	7.5	0.6	C231J185-3S****	0.68	10.5	11.0	5.0	7.5	0.6	C232A684-3S****	0.22	10.5	11.0	5.0	7.5	0.6	C232E224-3S****
0.10	13.0	9.0	4.0	10.0	0.6	C231J104-4S****	1.0	10.5	12.0	6.0	7.5	0.6	C232A105-3S****	0.27	10.5	12.0	6.0	7.5	0.6	C232E274-3S****
0.15	13.0	9.0	4.0	10.0	0.6	C231J154-4S****	0.10	13.0	9.0	4.0	10.0	0.6	C232A104-4S****	0.33	10.5	12.0	6.0	7.5	0.6	C232E334-3S****
0.22	13.0	9.0	4.0	10.0	0.6	C231J224-4S****	0.15	13.0	9.0	4.0	10.0	0.6	C232A154-4S****	0.033	13.0	9.0	4.0	10.0	0.6	C232E333-4S****
0.33	13.0	9.0	4.0	10.0	0.6	C231J334-4S****	0.22	13.0	9.0	4.0	10.0	0.6	C232A224-4S****	0.047	13.0	9.0	4.0	10.0	0.6	C232E473-4S****
0.47	13.0	9.0	4.0	10.0	0.6	C231J474-4S****	0.33	13.0	9.0	4.0	10.0	0.6	C232A334-4S****	0.068	13.0	9.0	4.0	10.0	0.6	C232E683-4S****
0.68	13.0	9.0	4.0	10.0	0.6	C231J684-4S****	0.47	13.0	9.0	4.0	10.0	0.6	C232A474-4S****	0.10	13.0	9.0	4.0	10.0	0.6	C232E104-4S****
1.0	13.0	9.0	4.0	10.0	0.6	C231J105-4S****	0.68	13.0	9.0	4.0	10.0	0.6	C232A684-4S****	0.15	13.0	9.0	4.0	10.0	0.6	C232E154-4S****
1.5	13.0	11.0	5.0	10.0	0.6	C231J155-4S****	1.0	13.0	11.0	5.0	10.0	0.6	C232A105-4S****	0.22	13.0	11.0	5.0	10.0	0.6	C232E224-4S****
1.8	13.0	12.0	6.0	10.0	0.6	C231J185-4S****	1.5	13.0	12.0	6.0	10.0	0.6	C232A155-4S****	0.33	13.0	11.0	5.0	10.0	0.6	C232E334-4S****
2.2	13.0	12.0	6.0	10.0	0.6	C231J225-4S****	0.33	17.5	11.0	5.0	15.0	0.8	C232A334-6S****	0.39	13.0	12.0	6.0	10.0	0.6	C232E394-4S****
0.68	17.5	11.0	5.0	15.0	0.8	C231J684-6S****	0.47	17.5	11.0	5.0	15.0	0.8	C232A474-6S****	0.47	13.0	12.0	6.0	10.0	0.6	C232E474-4S****
1.0	17.5	11.0	5.0	15.0	0.8	C231J105-6S****	0.68	17.5	11.0	5.0	15.0	0.8	C232A684-6S****	0.10	17.5	11.0	5.0	15.0	0.8	C232E104-6S****
1.5	17.5	11.0	5.0	15.0	0.8	C231J155-6S****	1.0	17.5	11.0	5.0	15.0	0.8	C232A105-6S****	0.15	17.5	11.0	5.0	15.0	0.8	C232E154-6S****
1.8	17.5	11.0	5.0	15.0	0.8	C231J185-6S****	1.5	17.5	12.0	6.0	15.0	0.8	C232A155-6S****	0.22	17.5	11.0	5.0	15.0	0.8	C232E224-6S****
2.2	17.5	11.0	5.0	15.0	0.8	C231J225-6S****	1.8	17.5	12.0	6.0	15.0	0.8	C232A185-6S****	0.33	17.5	11.0	5.0	15.0	0.8	C232E334-6S****
3.3	17.5	12.0	6.0	15.0	0.8	C231J335-6S****	2.2	17.5	12.0	6.0	15.0	0.8	C232A225-6S****	0.47	17.5	11.0	5.0	15.0	0.8	C232E474-6S****
4.7	17.5	13.5	7.5	15.0	0.8	C231J475-6S****	3.3	17.5	13.5	7.5	15.0	0.8	C232A335-6S****	0.68	17.5	12.0	6.0	15.0	0.8	C232E684-6S****
6.8	17.5	14.5	8.5	15.0	0.8	C231J685-6S****	4.7	17.5	14.5	8.5	15.0	0.8	C232A475-6S****	1.0	17.5	13.5	7.5	15.0	0.8	C232E105-6S****
10.0	17.5	19.0	11.0	15.0	0.8	C231J106-6S****	1.5	26.5	15.0	6.0	22.5	0.8	C232A155-9S****	1.5	17.5	14.5	8.5	15.0	0.8	C232E155-6S****
3.3	26.5	16.0	7.0	22.5	0.8	C231J335-9S****	1.8	26.5	15.0	6.0	22.5	0.8	C232A185-9S****	0.22	26.5	15.0	6.0	22.5	0.8	C232E224-9S****
4.7	26.5	16.0	7.0	22.5	0.8	C231J475-9S****	2.2	26.5	15.0	6.0	22.5	0.8	C232A225-9S****	0.47	26.5	15.0	6.0	22.5	0.8	C232E474-9S****
6.8	26.5	16.0	7.0	22.5	0.8	C231J685-9S****	3.3	26.5	15.0	6.0	22.5	0.8	C232A335-9S****	0.68	26.5	15.0	6.0	22.5	0.8	C232E684-9S****
10.0	26.5	17.0	8.5	22.5	0.8	C231J106-9S****	4.7	26.5	16.0	7.0	22.5	0.8	C232A475-9S****	1.0	26.5	15.0	6.0	22.5	0.8	C232E105-9S****
15.0	26.5	20.0	11.0	22.5	0.8	C231J156-9S****	6.8	26.5	18.5	10.0	22.5	0.8	C232A685-9S****	1.5	26.5	16.0	7.0	22.5	0.8	C232E155-9S****
4.7	32.0	18.0	9.0	27.5	0.8	C231J475-BS****	10.0	26.5	22.0	12.0	22.5	0.8	C232A106-9S****	1.8	26.5	16.0	7.0	22.5	0.8	C232E185-9S****
6.8	32.0	18.0	9.0	27.5	0.8	C231J685-BS****	4.7	32.0	18.0	9.0	27.5	0.8	C232A475-BS****	2.2	26.5	17.0	8.5	22.5	0.8	C232E225-9S****
10.0	32.0	18.0	9.0	27.5	0.8	C231J106-BS****	6.8	32.0	18.0	9.0	27.5	0.8	C232A685-BS****	3.3	26.5	20.0	11.0	22.5	0.8	C232E335-9S****
15.0	32.0	18.0	9.0	27.5	0.8	C231J156-BS****	10.0	32.0	20.0	11.0	27.5	0.8	C232A106-BS****	1.5	32.0	18.0	9.0	27.5	0.8	C232E155-BS****
22.0	32.0	22.0	13.0	27.5	0.8	C231J226-BS****	15.0	32.0	20.0	11.0	27.5	0.8	C232A156-BS****	1.8	32.0	18.0	9.0	27.5	0.8	C232E185-BS****
33.0	32.0	24.5	15.0	27.5	0.8	C231J336-BS****	22.0M	32.0	25.0	13.0	27.5	0.8	C232A226MBS****	2.2	32.0	18.0	9.0	27.5	0.8	C232E225-BS****
47.0	32.0	30.0	16.0	27.5	0.8	C231J476-BS****	33.0	32.0	30.0	16.0	27.5	0.8	C232A336-BS****	3.3	32.0	18.0	9.0	27.5	0.8	C232E335-BS****
														4.7	32.0	20.0	11.0	27.5	0.8	C232E475-BS****
														6.8	32.0	22.0	13.0	27.5	0.8	C232E685-BS****
														10.0	32.0	24.5	15.0	27.5	0.8	C232E106-BS****

备注 Note: 1. “-”表示容量偏差。 “-”=capacitance tolerance code. M=±20%, K=±10%, J=±5%。
2. “****”表示引线加工和包装代码(见表1)。“****”=lead form and packing code(refer to table 1).



■ 外形尺寸 Dimensions(mm)

Pattern II(Reduced sizes)

400Vdc (200Vac)							630Vdc (220Vac)							1 000Vdc (300Vac)						
C _N (μF)	W	H	T	P	d	Part number	C _N (μF)	W	H	T	P	d	Part number	C _N (μF)	W	H	T	P	d	Part number
0.022	10.5	8.5	3.5	7.5	0.5	C232G223-3S****	0.0022	10.5	8.5	3.5	7.5	0.5	C232J222-3S****	0.0010	10.5	8.5	3.5	7.5	0.5	C233A102-3S****
0.033	10.5	8.5	3.5	7.5	0.5	C232G333-3S****	0.0047	10.5	8.5	3.5	7.5	0.5	C232J472-3S****	0.0015	10.5	8.5	3.5	7.5	0.5	C233A152-3S****
0.047	10.5	9.0	4.0	7.5	0.6	C232G473-3S****	0.0068	10.5	8.5	3.5	7.5	0.5	C232J682-3S****	0.0022	10.5	8.5	3.5	7.5	0.5	C233A222-3S****
0.068	10.5	11.0	5.0	7.5	0.6	C232G683-3S****	0.010	10.5	8.5	3.5	7.5	0.5	C232J103-3S****	0.0033	10.5	8.5	3.5	7.5	0.5	C233A332-3S****
0.082	10.5	12.0	6.0	7.5	0.6	C232G823-3S****	0.015	10.5	9.0	4.0	7.5	0.6	C232J153-3S****	0.0047	10.5	8.5	3.5	7.5	0.5	C233A472-3S****
0.10	10.5	12.0	6.0	7.5	0.6	C232G104-3S****	0.022	10.5	11.0	5.0	7.5	0.6	C232J223-3S****	0.0068	10.5	9.0	4.0	7.5	0.6	C233A682-3S****
0.010	13.0	9.0	4.0	10.0	0.6	C232G103-4S****	0.033	10.5	12.0	6.0	7.5	0.6	C232J333-3S****	0.010	10.5	11.0	5.0	7.5	0.6	C233A103-3S****
0.015	13.0	9.0	4.0	10.0	0.6	C232G153-4S****	0.047	10.5	12.0	6.0	7.5	0.6	C232J473-3S****	0.015	10.5	12.0	6.0	7.5	0.6	C233A153-3S****
0.022	13.0	9.0	4.0	10.0	0.6	C232G223-4S****	0.0047	13.0	9.0	4.0	10.0	0.6	C232J472-4S****	0.0010	13.0	9.0	4.0	10.0	0.6	C233A102-4S****
0.033	13.0	9.0	4.0	10.0	0.6	C232G333-4S****	0.0068	13.0	9.0	4.0	10.0	0.6	C232J682-4S****	0.0015	13.0	9.0	4.0	10.0	0.6	C233A152-4S****
0.047	13.0	9.0	4.0	10.0	0.6	C232G473-4S****	0.010	13.0	9.0	4.0	10.0	0.6	C232J103-4S****	0.0022	13.0	9.0	4.0	10.0	0.6	C233A222-4S****
0.056	13.0	9.0	4.0	10.0	0.6	C232G563-4S****	0.015	13.0	9.0	4.0	10.0	0.6	C232J153-4S****	0.0033	13.0	9.0	4.0	10.0	0.6	C233A332-4S****
0.068	13.0	11.0	5.0	10.0	0.6	C232G683-4S****	0.022	13.0	9.0	4.0	10.0	0.6	C232J223-4S****	0.0047	13.0	9.0	4.0	10.0	0.6	C233A472-4S****
0.10	13.0	11.0	5.0	10.0	0.6	C232G104-4S****	0.033	13.0	11.0	5.0	10.0	0.6	C232J333-4S****	0.0056	13.0	9.0	4.0	10.0	0.6	C233A562-4S****
0.15	13.0	12.0	6.0	10.0	0.6	C232G154-4S****	0.047	13.0	11.0	5.0	10.0	0.6	C232J473-4S****	0.0068	13.0	9.0	4.0	10.0	0.6	C233A682-4S****
0.047	17.5	11.0	5.0	15.0	0.8	C232G473-6S****	0.068	13.0	12.0	6.0	10.0	0.6	C232J683-4S****	0.010	13.0	9.0	4.0	10.0	0.6	C233A103-4S****
0.068	17.5	11.0	5.0	15.0	0.8	C232G683-6S****	0.033	17.5	11.0	5.0	15.0	0.8	C232J333-6S****	0.015	13.0	11.0	5.0	10.0	0.6	C233A153-4S****
0.10	17.5	11.0	5.0	15.0	0.8	C232G104-6S****	0.047	17.5	11.0	5.0	15.0	0.8	C232J473-6S****	0.022	13.0	11.0	5.0	10.0	0.6	C233A223-4S****
0.15	17.5	11.0	5.0	15.0	0.8	C232G154-6S****	0.068	17.5	11.0	5.0	15.0	0.8	C232J683-6S****	0.010	17.5	11.0	5.0	15.0	0.8	C233A103-6S****
0.22	17.5	12.0	6.0	15.0	0.8	C232G224-6S****	0.10	17.5	12.0	6.0	15.0	0.8	C232J104-6S****	0.015	17.5	11.0	5.0	15.0	0.8	C233A153-6S****
0.33	17.5	13.5	7.5	15.0	0.8	C232G334-6S****	0.15	17.5	13.5	7.5	15.0	0.8	C232J154-6S****	0.022	17.5	11.0	5.0	15.0	0.8	C233A223-6S****
0.47	17.5	14.5	8.5	15.0	0.8	C232G474-6S****	0.22	17.5	16.0	10.0	15.0	0.8	C232J224-6S****	0.033	17.5	12.0	6.0	15.0	0.8	C233A333-6S****
0.56	17.5	16.0	10.0	15.0	0.8	C232G564-6S****	0.33	17.5	19.0	11.0	15.0	0.8	C232J334-6S****	0.047	17.5	12.0	6.0	15.0	0.8	C233A473-6S****
0.68	17.5	16.0	10.0	15.0	0.8	C232G684-6S****	0.10	26.5	15.0	6.0	22.5	0.8	C232J104-9S****	0.068	17.5	13.5	7.5	15.0	0.8	C233A683-6S****
0.22	26.5	15.0	6.0	22.5	0.8	C232G224-9S****	0.15	26.5	15.0	6.0	22.5	0.8	C232J154-9S****	0.10	17.5	14.5	8.5	15.0	0.8	C233A104-6S****
0.33	26.5	15.0	6.0	22.5	0.8	C232G334-9S****	0.22	26.5	16.0	7.0	22.5	0.8	C232J224-9S****	0.033	26.5	15.0	6.0	22.5	0.8	C233A333-9S****
0.47	26.5	15.0	6.0	22.5	0.8	C232G474-9S****	0.33	26.5	16.0	7.0	22.5	0.8	C232J334-9S****	0.047	26.5	15.0	6.0	22.5	0.8	C233A473-9S****
0.68	26.5	16.0	7.0	22.5	0.8	C232G684-9S****	0.47	26.5	17.0	8.5	22.5	0.8	C232J474-9S****	0.068	26.5	15.0	6.0	22.5	0.8	C233A683-9S****
1.0	26.5	18.50	10.0	22.5	0.8	C232G105-9S****	0.68	26.5	22.0	12.0	22.5	0.8	C232J684-9S****	0.10	26.5	15.0	6.0	22.5	0.8	C233A104-9S****
1.5	26.5	22.0	12.0	22.5	0.8	C232G155-9S****	0.33	32.0	18.0	9.0	27.5	0.8	C232J334-BS****	0.15	26.5	16.0	7.0	22.5	0.8	C233A154-9S****
0.68	32.0	18.0	9.0	27.5	0.8	C232G684-BS****	0.47	32.0	18.0	9.0	27.5	0.8	C232J474-BS****	0.22	26.5	17.0	8.5	22.5	0.8	C233A224-9S****
1.0	32.0	18.0	9.0	27.5	0.8	C232G105-BS****	0.68	32.0	20.0	11.0	27.5	0.8	C232J684-BS****	0.33	26.5	20.0	11.0	22.5	0.8	C233A334-9S****
1.5	32.0	20.0	11.0	27.5	0.8	C232G155-BS****	1.0K	32.0	20.0	11.0	27.5	0.8	C232J105KBS****	0.15	32.0	18.0	9.0	27.5	0.8	C233A154-BS****
1.8	32.0	20.0	11.0	27.5	0.8	C232G185-BS****							0.22	32.0	18.0	9.0	27.5	0.8	C233A224-BS****	
2.2	32.0	22.0	13.0	27.5	0.8	C232G225-BS****							0.33	32.0	20.0	11.0	27.5	0.8	C233A334-BS****	
3.3	32.0	24.5	15.0	27.5	0.8	C232G335-BS****							0.47	32.0	20.0	11.0	27.5	0.8	C233A474-BS****	
4.7	32.0	30.0	16.0	27.5	0.8	C232G475-BS****							0.68	32.0	28.0	14.0	27.5	0.8	C233A684-BS****	
6.8	32.0	33.0	18.0	27.5	0.8	C232G685-BS****							1.0	32.0	30.0	16.0	27.5	0.8	C233A105-BS****	
													1.5	32.0	37.0	22.0	27.5	0.8	C233A155-BS****	

备注 Note: 1. “-” 表示容量偏差。 “ ” =capacitance tolerance code. M=±20%, K=±10%, J=±5%。
 2. “****” 表示引线加工和包装代码(见表 1)。“****” =lead form and packing code(refer to table 1).
 3. “@” 不用作跨线, 请参见抗干扰电容器 (Page 109)。
 “@” Not suitable for across-the-line applications. Pls refer to interference Suppression Capacitors(Page 109).