

YA Series **NEW**

• Low ESR • High Voltage, Long Life.

• 105℃, 5,000~10,000hrs.

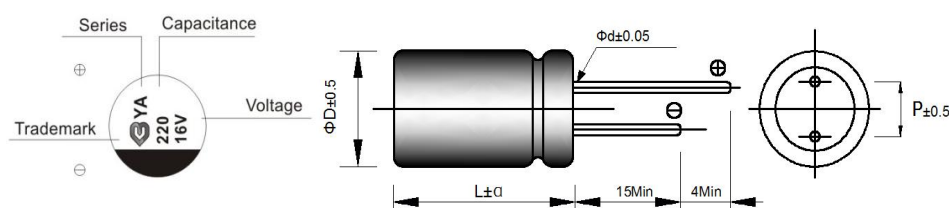
• RoHS compliant



◆ 规格表 Specifications

项目 Items	特性参数 Characteristics		
使用温度范围 Category Temperture Range	-55 ~ +105℃		
额定工作电压范围 Rated Voltage Range	16 ~ 125 V		
静电容量允许偏差 Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
漏电流 Leakage Current	施加额定工作电压2分钟后读数，小于或等于规格值 (20℃) I≤0.01CV 或3μA（取大值）（The bigger） After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
损耗角正切值 tanδ Dissipation Factor	小于或等于规格 (at 20℃,120Hz) Less than or equal to the specified		
温度特性 Low Temperture Characteristics (Max.Impedance Ratio)	Z(-55℃)/Z(+20℃)	≦ 0.75 to 2.0	(100KHz)
	Z(+105℃)/Z(+20℃)	≦ 0.75 to 1.5	
耐久性 Endurance	必须满足以下参数：电容在20度的环境下储存，在105度的环境下施加额定电压至5000到10000小时。 ΦD=Φ6.3=5,000hrs, ΦD≧Φ8=10,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 5,000 to 10,000 hours at 105℃. ΦD=Φ6.3=5,000hrs, ΦD≧Φ8=10,000hrs;		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	
Damp Heat (Steady State) 耐湿负荷特性	在20度的环境下将其调整储存在湿度为90~95%，60度的环境下1000小时，不施加直流电，必须满足如下参数： The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours ,without DC applied.		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	
浪涌电压特性 (Surge Voltage)	浪涌电压=额定电压* 1.25(V) Surge Voltage=Rated voltage * 1.25(V) 在通过1KΩ的电阻保护下，15~35℃ 施加浪涌电压30秒，并且放电5分钟30秒，电容器必须满足完成1000次的持续充放电循环。 The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	

◆ 外形图 Dimensions (mm)



(Unit:mm)

Coated Case	6.3*7.2	8*9.5	10*9.5	10*11.5
ΦD	6.3	8	10	10
L	L+1.5Max			
Φd	0.5	0.5	0.6	0.6
p	2.5	3.5	5.0	5.0

YA Series

◆ 尺寸与最大纹波电流一览表 Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size $\Phi D \times L$ (mm)	Leakage current (uA)	ESR(m Ω) at 20°C, 100 KHz	Rated ripple current (mA _{rms} /105°C/100kHz)	tan δ (120Hz)
16	120	6.3*7.2	19.2	40	1500	0.16
	270	8*9.5	43.2	26	2000	0.16
	470	10*9.5	75.2	21	2600	0.16
	560	10*11.5	89.6	15	3000	0.16
25	68	6.3*7.2	17	45	1400	0.16
	150	8*9.5	37.5	27	1900	0.16
	270	10*9.5	67.5	22	2500	0.16
	330	10*11.5	82.5	16	2900	0.16
35	47	6.3*7.2	16.45	60	1300	0.16
	100	8*9.5	35	30	1800	0.16
	150	10*9.5	52.5	23	2400	0.16
	220	10*11.5	77	17	2800	0.16
40	27	6.3*7.2	10.8	70	1200	0.16
	56	8*9.5	22.4	32	1700	0.16
	100	10*9.5	40	24	2400	0.16
	120	10*11.5	48	18	2700	0.16
50	15	6.3*7.2	7.5	80	1200	0.16
	33	8*9.5	16.5	35	1600	0.16
	56	10*9.5	28	25	2300	0.16
	82	10*11.5	41	19	2600	0.16
63	10	6.3*7.2	6.3	100	1000	0.16
	22	8*9.5	13.86	40	1500	0.16
	33	8*9.5	20.79	40	1500	0.16
	33	10*9.5	20.79	30	2100	0.16
	47	10*9.5	29.61	30	2100	0.16
	56	10*11.5	35.28	22	2400	0.16
80	12	10*9.5	9.6	70	1600	0.16
	15	10*9.5	12	70	1600	0.16
	18	10*11.5	14.4	50	1800	0.16
100	10	10*9.5	10	80	1400	0.16
	12	10*9.5	12	80	1400	0.16
	15	10*11.5	15	60	1600	0.16
125	10	10*9.5	12.5	90	1200	0.16

◆ 纹波电流修正系数 Rated Ripple Current Coefficient

频率Frequency(Hz)	100Hz $\leq f < 1$ kHz	1kHz $\leq f < 10$ kHz	10kHz $\leq f < 100$ kHz	100kHz $\leq f$
4.7 $< C \leq 33$	0.05	0.32	0.67	1.00
33 $< C$	0.10	0.35	0.70	1.00

YB Series **NEW**

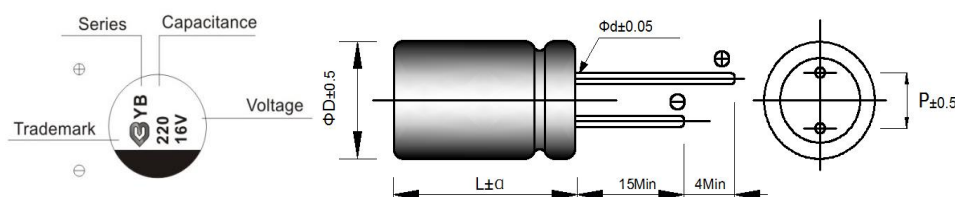
- Low ESR
- High Voltage, Long Life.
- 125°C, 2,000~4,000hrs.
- RoHS compliant



◆ 规格表 Specifications

项目Items	特性参数Characteristics		
使用温度范围 Category Temperture Range	-55 ~ +125℃		
额定工作电压范围 Rated Voltage Range	16 ~ 50 V		
静电容量允许偏差 Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
漏电流 Leakage Current	施加额定工作电压2分钟后读数, 小于或等于规格值 (20℃) I≤0.01CV 或3μA (取大值) (The bigger) After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
损耗角正切值tanδ Dissipation Factor	小于或等于规格 Less than or equal to the specified (at 20℃,120Hz)		
温度特性 Low Temperture Characteristics (Max.Impedance Ratio)	Z(-55℃)/Z(+20℃)	≦ 0.75 to 2.0	(100KHz)
	Z+125℃)/Z(+20℃)	≦ 0.75 to 1.5	
耐久性 Endurance	必须满足以下参数: 电容在20度的环境下储存, 在125度的环境下施加额定电压至2000到4000小时。 ΦD=Φ6.3=2,000hrs, ΦD≧Φ8=4,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for2,000 to 4,000 hours at 125℃. ΦD=Φ6.3=2,000hrs, ΦD≧Φ8=4,000hrs;		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	
Damp Heat (Steady State) 耐湿负荷特性	在20度的环境下将其调整储存在湿度为90~95%, 60度的环境下1000小时, 不施加直流电, 必须满足如下参数: The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours ,without DC applied.		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	
浪涌电压特性 (Surge Voltage)	浪涌电压=额定电压* 1.25(V) Surge Voltage=Rated voltage * 1.25(V) 在通过1KΩ的电阻保护下, 15~35℃ 施加浪涌电压30秒, 并且放电5分钟30秒, 电容器必须满足完成1000次的持续充放电循环。 The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≦±30% of the initial value	
	D.F.(tanδ)	≦200% of the specified value	
	ESR	≦200% of the specified value	
	Leakage current	≦The specified value	

◆ 外形图 Dimensions (mm)



(Unit:mm)

Coated Case	6.3*7.2	8*9.5	10*9.5	10*11.5
ΦD	6.3	8	10	10
L	L+1.5Max			
Φd	0.5	0.5	0.6	0.6
p	2.5	3.5	5.0	5.0

YB Series

◆ 尺寸与最大纹波电流一览表 Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size $\Phi D \times L$ (mm)	Leakage current (uA)	ESR(m Ω) at 20℃, 100 KHz	Rated ripple current (mA _{rms} /125℃/100kHz)	tan δ (120Hz)
16	120	6.3*7.2	19.2	40	1100	0.16
	270	8*9.5	43.2	26	1500	0.16
	470	10*9.5	75.2	21	2000	0.16
	560	10*11.5	89.6	15	2300	0.16
25	68	6.3*7.2	17	45	1000	0.16
	150	8*9.5	37.5	27	1300	0.16
	270	10*9.5	67.5	22	1500	0.16
	330	10*11.5	82.5	16	1700	0.16
35	47	6.3*7.2	16.45	60	900	0.16
	100	8*9.5	35	30	1200	0.16
	150	10*9.5	52.5	23	1400	0.16
	220	10*11.5	77	17	1600	0.16
40	27	6.3*7.2	10.8	70	900	0.16
	56	8*9.5	22.4	32	1200	0.16
	100	10*9.5	40	24	1400	0.16
	120	10*11.5	48	18	1600	0.16
50	15	6.3*7.2	7.5	80	800	0.16
	33	8*9.5	16.5	35	1100	0.16
	56	10*9.5	28	25	1300	0.16
	82	10*11.5	41	19	1500	0.16

◆ 纹波电流修正系数 Rated Ripple Current Coefficient

频率Frequency(Hz)	100Hz $\leq f < 1$ kHz	1kHz $\leq f < 10$ kHz	10kHz $\leq f < 100$ kHz	100kHz $\leq f$
4.7 < C $\leq$ 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00

TA Series **NEW**

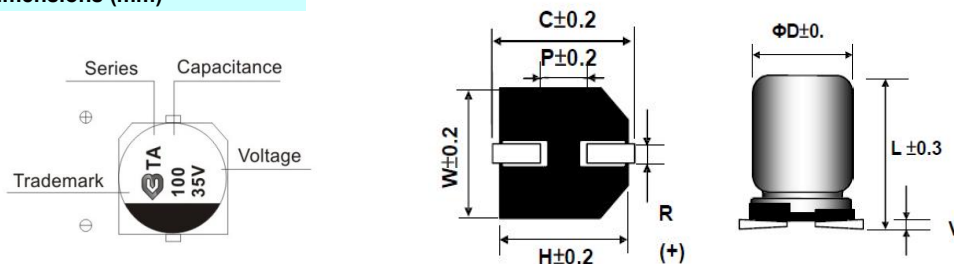
- Low ESR
- High Voltage, Long Life.
- 105℃, 5,000~10,000hrs.
- RoHS compliant



◆ 规格表 Specifications

项目Items	特性参数Characteristics		
使用温度范围 Category Temperture Range	-55 ~ +105℃		
额定工作电压范围 Rated Voltage Range	16 ~ 125 V		
静电容量允许偏差 Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
漏电流 Leakage Current	施加额定工作电压2分钟后读数，小于或等于规格值 (20℃) I≤0.01CV 或 3μA（取大值）（The bigger） After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
损耗角正切值tanδ Dissipation Factor	小于或等于规格值 Less than or equal to the specified (at 20℃,120Hz)		
温度特性 Low Temperture Characteristics (Max.Impedance Ratio)	Z(-55℃)/Z(+20℃)	≡ 0.75 to 2.0	(100KHz)
	Z(+105℃)/Z(+20℃)	≡ 0.75 to 1.5	
耐久性 Endurance	必须满足以下参数：电容在20度的环境下储存，在105度的环境下施加额定电压至5000到10000小时。 ΦD=Φ6.3=5,000hrs, ΦD≧Φ8=10,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 5,000 to 10,000 hours at 105℃. Φ6.3=5,000hrs, D≧Φ8=10,000hrs;		
	Appearance	No significant damage	
	Capacitance change	≡±30% of the initial value	
	D.F.(tanδ)	≡200% of the specified value	
	ESR	≡200% of the specified value	
	Leakage current	≡The specified value	
Damp Heat (Steady State) 耐湿负荷特性	在20度的环境下将其调整储存在湿度为90~95%，60度的环境下1000小时，不施加直流电，必须满足如下参数： The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours ,without DC applied.		
	Appearance	No significant damage	
	Capacitance change	≡±30% of the initial value	
	D.F.(tanδ)	≡200% of the specified value	
	ESR	≡200% of the specified value	
	Leakage current	≡The specified value	
浪涌电压特性 (Surge Voltage)	浪涌电压=额定电压* 1.25(V) Surge Voltage=Rated voltage * 1.25(V) 在通过1KΩ的电阻保护下，15~35℃ 施加浪涌电压30秒，并且放电5分钟30秒，电容器必须满足完成1000次的持续充放电循环。 The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≡±30% of the initial value	
	D.F.(tanδ)	≡200% of the specified value	
	ESR	≡200% of the specified value	
	Leakage current	≡The specified value	

◆ 外形图 Dimensions (mm)



(Unit:mm)

Size	ΦD	L	W	H	C	R	P	V max
6.3*7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1	0.3
8*10.5	8	10.5	8.3	8.3	9	0.7~1.1	3.2	0.3
10*10.5	10	10.5	10.3	10.3	11	0.7~1.3	4.5	0.3
10*12.5	10	12.5	10.3	10.3	11	0.7~1.3	4.5	0.3

TA Series

◆ 尺寸与最大纹波电流一览表 Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size $\Phi D \times L$ (mm)	Leakage current (uA)	ESR(m Ω) at 20℃, 100 KHz	Rated ripple current (mA _{rms} /105℃/100kHz)	tan δ (120Hz)
16	120	6.3*7.7	19.2	40	1500	0.16
	270	8*10.5	43.2	26	2000	0.16
	470	10*10.5	75.2	21	2600	0.16
	560	10*12.5	89.6	15	3000	0.16
25	68	6.3*7.7	17	45	1400	0.16
	150	8*10.5	37.5	27	1900	0.16
	270	10*10.5	67.5	22	2500	0.16
	330	10*12.5	82.5	16	2900	0.16
35	47	6.3*7.7	16.45	60	1300	0.16
	100	8*10.5	35	30	1800	0.16
	150	10*10.5	52.5	23	2400	0.16
	220	10*12.5	77	17	2800	0.16
40	27	6.3*7.7	10.8	70	1200	0.16
	56	8*10.5	22.4	32	1700	0.16
	100	10*10.5	40	24	2400	0.16
	120	10*12.5	48	18	2700	0.16
50	15	6.3*7.7	7.5	80	1200	0.16
	33	8*10.5	16.5	35	1600	0.16
	56	10*10.5	28	25	2300	0.16
	82	10*12.5	41	19	2600	0.16
63	10	6.3*7.7	6.3	100	1000	0.16
	22	8*10.5	13.86	40	1500	0.16
	33	8*10.5	20.79	40	1500	0.16
	33	10*10.5	20.79	30	2100	0.16
	47	10*10.5	29.61	30	2100	0.16
	56	10*12.5	35.28	22	2400	0.16
80	12	10*10.5	9.6	70	1600	0.16
	15	10*10.5	12	70	1600	0.16
	18	10*12.5	14.4	50	1800	0.16
100	10	10*10.5	10	80	1400	0.16
	12	10*10.5	12	80	1400	0.16
	15	10*12.5	15	60	1600	0.16
125	10	10*10.5	12.5	90	1200	0.16

◆ 纹波电流修正系数 Rated Ripple Current Coefficient

频率Frequency(Hz)	100Hz $\leq f < 1$ kHz	1kHz $\leq f < 10$ kHz	10kHz $\leq f < 100$ kHz	100kHz $\leq f$
4.7 < C $\leq$ 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00

TB Series **NEW**

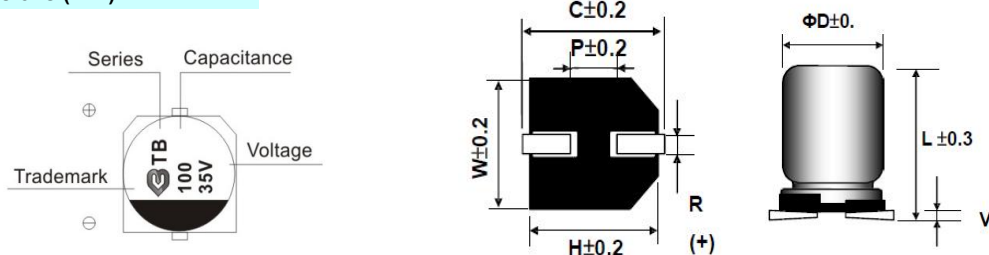
- Low ESR
- High Voltage, Long Life.
- 125℃, 2,000~4,000hrs.
- RoHS compliant



◆ 规格表 Specifications

项目Items	特性参数Characteristics		
使用温度范围 Category Temperture Range	-55 ~ +125℃		
额定工作电压范围 Rated Voltage Range	16 ~ 125 V		
静电容量允许偏差 Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
漏电流 Leakage Current	施加额定工作电压2分钟后读数，小于或等于规格值 (20℃) I≤0.01CV 或3μA (取大值) (The bigger) After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
损耗角正切值tanδ Dissipation Factor	小于或等于规格 (at 20℃,120Hz) Less than or equal to the specified		
温度特性 Low Temperture Characteristics (Max.Impedance Ratio)	Z(-55℃)/Z(+20℃)	≦ 0.75 to 2.0	(100KHz)
	Z+125℃)/Z(+20℃)	≦ 0.75 to 1.5	
耐久性 Endurance	必须满足以下参数：电容在20度的环境下储存，在125度的环境下施加额定电压至2000到4000小时。 ΦD=Φ6.3=2,000hrs, ΦD≧Φ8=4,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20℃after the rated voltage is applied for 2,000 to 4,000 hours at 125℃. ΦD=Φ6.3=2,000hrs, ΦD≧Φ8=4,000hrs.		
	Appearance	No significant damage	
	Capacitance change	≧±30% of the initial value	
	D.F.(tanδ)	≧200% of the specified value	
	ESR	≧200% of the specified value	
	Leakage current	≧The specified value	
Damp Heat (Steady State) 耐湿负荷特性	在20度的环境下将其调整储存在湿度为90~95%，60度的环境下1000小时，不施加直流电，必须满足如下参数： The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours ,without DC applied.		
	Appearance	No significant damage	
	Capacitance change	≧±30% of the initial value	
	D.F.(tanδ)	≧200% of the specified value	
	ESR	≧200% of the specified value	
	Leakage current	≧The specified value	
浪涌电压特性 (Surge Voltage)	浪涌电压=额定电压* 1.25(V) Surge Voltage=Rated voltage * 1.25(V) 在通过1KΩ的电阻保护下，15~35℃ 施加浪涌电压30秒，并且放电5分钟30秒，电容器必须满足完成1000次的持续充放循环。 The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≧±30% of the initial value	
	D.F.(tanδ)	≧200% of the specified value	
	ESR	≧200% of the specified value	
	Leakage current	≧The specified value	

◆ 外形图 Dimensions (mm)



Size	ΦD	L	W	H	C	R	P	V max
6.3*7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1	0.3
8*10.5	8	10.5	8.3	8.3	9	0.7~1.1	3.2	0.3
10*10.5	10	10.5	10.3	10.3	11	0.7~1.3	4.5	0.3
10*12.5	10	12.5	10.3	10.3	11	0.7~1.3	4.5	0.3

TB Series

◆ 尺寸与最大纹波电流一览表 Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size $\Phi D \times L$ (mm)	Leakage current (uA)	ESR(m Ω) at 20℃, 100 KHz	Rated ripple current (mA rms/125℃/100kHz)	tan δ (120Hz)
16 (1C)	120	6.3*7.7	19.2	40	1100	0.16
	270	8*10.5	43.2	26	1500	0.16
	470	10*10.5	75.2	21	2000	0.16
	560	10*12.5	89.6	15	2300	0.16
25 (1E)	68	6.3*7.7	17	45	1000	0.16
	150	8*10.5	37.5	27	1300	0.16
	270	10*10.5	67.5	22	1500	0.16
	330	10*12.5	82.5	16	1700	0.16
35 (1V)	47	6.3*7.7	16.45	60	900	0.16
	100	8*10.5	35	30	1200	0.16
	150	10*10.5	52.5	23	1400	0.16
	220	10*12.5	77	17	1700	0.16
40 (1G)	27	6.3*7.7	10.8	70	900	0.16
	56	8*10.5	22.4	32	1200	0.16
	100	10*10.5	40	24	1400	0.16
	120	10*12.5	48	18	1600	0.16
50 (1H)	15	6.3*7.7	7.5	80	800	0.16
	33	8*10.5	16.5	35	1100	0.16
	56	10*10.5	28	25	1300	0.16
	82	10*12.5	41	19	1500	0.16
63 (1J)	10	6.3*7.7	6.3	100	700	0.16
	22	8*10.5	13.86	40	1000	0.16
	33	8*10.5	20.79	40	1000	0.16
	33	10*10.5	20.79	30	1200	0.16
	47	10*10.5	29.61	30	1200	0.16
	56	10*12.5	35.28	22	1400	0.16
80 (1K)	12	10*10.5	9.6	70	900	0.16
	15	10*10.5	12	70	900	0.16
	18	10*12.5	14.4	50	1100	0.16
100 (2A)	10	10*10.5	10	80	800	0.16
	12	10*10.5	12	80	800	0.16
	15	10*12.5	15	60	1000	0.16
125	10	10*10.5	12.5	90	700	0.16

◆ 纹波电流修正系数 Rated Ripple Current Coefficient

频率Frequency(Hz)	$100\text{Hz} \leq f < 1\text{kHz}$	$1\text{kHz} \leq f < 10\text{kHz}$	$10\text{kHz} \leq f < 100\text{kHz}$	$100\text{kHz} \leq f$
$4.7 < C \leq 33$	0.05	0.32	0.67	1.00
$33 < C$	0.10	0.35	0.70	1.00