

## YA Series NFW

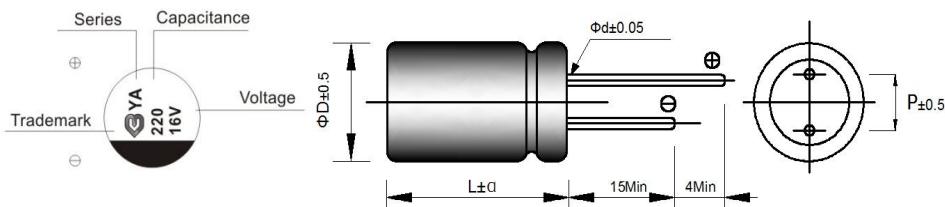
- Low ESR
- High Voltage, Long Life.
- 105°C, 5,000~10,000hrs.
- RoHS compliant

## ◆ 规格表 Specifications



项目 Items	特性参数 Characteristics												
使用温度范围 Category Temperture Range	-55 ~ +105°C												
额定工作电压范围 Rated Voltage Range	16 ~ 125 V												
静电容量允许偏差 Capacitance tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)												
漏电流 Leakage Current	<p>施加额定工作电压2分钟后读数，小于或等于规格值 (20°C)  <math>I \leq 0.01CV</math> 或 <math>10\mu A</math> (取大值) (The bigger)  After 2 minutes applied for rated voltage at 20°C, less than or equal to the specified value.</p>												
损耗角正切值tanδ Dissipation Factor	<p>小于或等于规格 Less than or equal to the specified</p> <p>(at 20°C, 120Hz)</p>												
温度特性 Low Temperature Characteristics (Max.Impedance Ratio)	Z(-55°C)/Z(+20°C)	$\leq 0.75$ to 1.5	(100KHz)										
	Z(+105°C)/Z(+20°C)	$\leq 0.75$ to 2.0											
耐久性 Endurance	<p>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。  <math>\Phi D=\Phi 6.3=5,000</math>hrs, <math>\Phi D \geq \Phi 8=10,000</math>hrs;</p> <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 5,000 to 10,000 hours at 105°C. <math>\Phi D=\Phi 6.3=5,000</math>hrs, <math>\Phi D \geq \Phi 8=10,000</math>hrs;</p> <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td><math>\leq \pm 30\%</math> of the initial value</td> </tr> <tr> <td>D.F.(tanδ)</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq</math> The specified value</td> </tr> </table>			Appearance	No significant damage	Capacitance change	$\leq \pm 30\%$ of the initial value	D.F.(tanδ)	$\leq 200\%$ of the specified value	ESR	$\leq 200\%$ of the specified value	Leakage current	$\leq$ The specified value
Appearance	No significant damage												
Capacitance change	$\leq \pm 30\%$ of the initial value												
D.F.(tanδ)	$\leq 200\%$ of the specified value												
ESR	$\leq 200\%$ of the specified value												
Leakage current	$\leq$ The specified value												
Damp Heat (Steady State)	<p>在60°C 温度，湿度90%~95%RH的环境中，施加额定电压1000小时后，恢复到20°C后，产品性能应满足以下要求</p> <p>The specifications listed below shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90% ~ 95% RH.</p> <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td><math>\leq \pm 30\%</math> of the initial value</td> </tr> <tr> <td>D.F.(tanδ)</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq</math> The specified value</td> </tr> </table>			Appearance	No significant damage	Capacitance change	$\leq \pm 30\%$ of the initial value	D.F.(tanδ)	$\leq 200\%$ of the specified value	ESR	$\leq 200\%$ of the specified value	Leakage current	$\leq$ The specified value
Appearance	No significant damage												
Capacitance change	$\leq \pm 30\%$ of the initial value												
D.F.(tanδ)	$\leq 200\%$ of the specified value												
ESR	$\leq 200\%$ of the specified value												
Leakage current	$\leq$ The specified value												
耐湿负荷特性													
浪涌电压特性 (Surge Voltage)	<p>浪涌电压=额定电压* 1.15(V)  Surge Voltage=Rated voltage * 1.15(V)</p> <p>在通过1kΩ的电阻保护下，15~35°C 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。</p> <p>The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35°C for 30 seconds through a protective resistor (<math>R=1k\Omega</math>) and discharge for 5 minutes 30seconds</p> <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td><math>\leq \pm 30\%</math> of the initial value</td> </tr> <tr> <td>D.F.(tanδ)</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 200\%</math> of the specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq</math> The specified value</td> </tr> </table>			Appearance	No significant damage	Capacitance change	$\leq \pm 30\%$ of the initial value	D.F.(tanδ)	$\leq 200\%$ of the specified value	ESR	$\leq 200\%$ of the specified value	Leakage current	$\leq$ The specified value
Appearance	No significant damage												
Capacitance change	$\leq \pm 30\%$ of the initial value												
D.F.(tanδ)	$\leq 200\%$ of the specified value												
ESR	$\leq 200\%$ of the specified value												
Leakage current	$\leq$ 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 ΦD*L(mm)	Leakage current (uA)	ESR(mΩ) at 20°C,100 KHz	Rated ripple current (mAmps/105°C/100kHz)	$\tan\delta$ (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	10	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	10	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	10	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

## ◆ 纹波电流补正系数 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
$C > 33$	0.10	0.35	0.70	1.00