

# FN

## 特点 Features

- 85°C 5000H。85°C 5000 hours.
- 电压范围：350V~450V。Voltage range : 350V~450V.
- 耐高纹波，长寿命。High ripple current, long life.
- 满足RoHS要求。RoHS compliant.



## 主要技术性能 Specifications

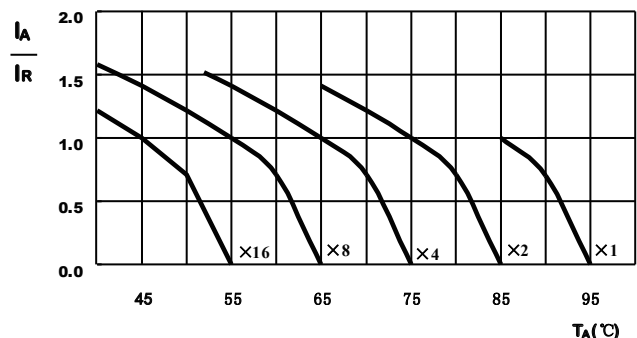
项目 Items	特性 Performance Characteristics	
类别温度范围 Category Temperature Range	-25~+85°C	
额定电压范围 Rated Voltage(U <sub>R</sub> )	350 ~ 450V	
标称容量范围 Nominal Capacitance Range(C <sub>R</sub> )	1000~12000μF	120Hz, +20°C
标称容量允许偏差 Allowed Capacitance Tolerance(C <sub>T</sub> )	±20%(M)	120Hz, +20°C
漏电流 Leakage Current(I <sub>L</sub> )	≤0.01 CRUR (μA)或5(mA),取较小值 ( Whichever is smaller )	
损耗角正切值 Tangent of loss angle(Tanδ)	≤0.15	
低温特性 Characteristics at low Temperature	U <sub>R</sub> (V)	350~450
	Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	8
高温贮存 Shelf Life	+85°C 1000小时贮存后, 加额定工作电压处理30分钟, 恢复16小时后: After storage for 1000 hours at +85°C, U <sub>R</sub> to be applied for 30 minutes and then resumed 16 hours. 电容量变化率 Capacitance change : ±20%初始测量值以内 within ±20% of initial value 损耗角正切值 Tanδ : ≤2倍初始规定值 Not more than 200% of specified value 漏电流 Leakage current : ≤初始规定值 Not more than specified value	

寿命时间(Lifetime)	使用寿命 ( Useful Life )		负载寿命 ( Load Life )	耐久性测试 ( Endurance Test )
	10000h	> 75000h	5000h	5000h
漏电流(Leakage Current)	≤初始规定值 Not more than specified value		≤初始规定值 Not more than specified value	≤初始规定值 Not more than specified value
电容量变化率(Capacitance Change)	±30%初始测量值内 Within ±30% initial value		±20%初始测量值内 Within ±20% initial value	±10%初始测量值内 Within ±10% initial value
损耗角正切值(Dissipation Factor)	≤3倍初始规定值 Not more than 300% of specified value		≤2倍初始规定值 Not more than 200% of specified value	≤1.3倍初始规定值 Not more than 130% of specified value
应用条件(Condition)	U <sub>R</sub>	U <sub>R</sub>	U <sub>R</sub>	U <sub>R</sub>
应用电压(Applied Voltage)	I <sub>R</sub>	1.4×I <sub>R</sub>	I <sub>R</sub>	I <sub>R</sub> =0
应用电流(Applied Current)	85°C	40°C	85°C	85°C
应用温度(Applied Temperature)	≤1%	≤1%	0%	0%
失效率(Outlier Percentage)				

## 频率系数 Frequency Coefficient

Frequency (Hz)	50	100 (120)	300	1k	≥10K
U <sub>R</sub> (V)					
350~450	0.70	1.00	1.10	1.30	1.40

## 寿命时间图 Life Time Graph



此图表示电容的使用寿命时间  
The graphs shows a typical trend of the standard capacitor useful life.

规格特性表  
Table of specifications and characteristics

$U_R(V)$	$C_R(\mu F)$	$DF_{max}$ 120Hz 20°C -	$ESR_{max}$ 120Hz 25°C mΩ	$ESR_{typ}$ 120Hz 25°C mΩ	$I_{AC,max}$ 120Hz 85°C A	$\Phi D \times L$ mm×mm
350	1500	0.15	132	70.8	5.4	51×80
	2200	0.15	90.5	48.3	7.5	51×105
	2200	0.15	90.5	48.3	7.8	63.5×80
	2700	0.15	73.7	39.3	9.2	63.5×80
	3300	0.15	60.3	32.2	10.6	63.5×105
	3900	0.15	51.0	27.2	11.7	63.5×105
	4700	0.15	42.3	22.6	12.5	63.5×135
	4700	0.15	42.3	22.6	13	76×105
	5600	0.15	35.5	19.0	14.5	63.5×145
	6800	0.15	29.3	15.6	17.8	76×135
	8200	0.15	24.3	12.9	20.8	76×170
	10000	0.15	19.9	10.6	24.6	76×190
12000	0.15	16.6	8.8	27.8	76×220	
400	1000	0.15	212	112	4.9	51×80
	1500	0.15	141	75.2	6.8	51×105
	2200	0.15	96.5	51.3	8.1	63.5×80
	2700	0.15	78.6	41.8	9.2	63.5×105
	3300	0.15	64.3	34.2	10.6	63.5×115
	3900	0.15	54.4	28.9	12.3	76×110
	4700	0.15	45.2	24.0	14.4	76×130
	5600	0.15	37.9	20.1	16.5	76×145
	6800	0.15	31.2	16.6	18.1	76×170
	8200	0.15	25.9	13.8	20.8	76×190
	10000	0.15	21.2	11.3	23.2	76×220
	450	1000	0.15	238	119	5.2
1500		0.15	159	79.6	6.7	63.5×80
2200		0.15	108	54.3	9.1	63.5×105
2700		0.15	88.5	44.2	10.5	76×105
3300		0.15	72.4	36.2	11.8	63.5×145
3900		0.15	61.2	30.6	13.2	76×130
4700		0.15	50.8	25.4	14.8	76×155
5600		0.15	42.7	21.3	16.9	76×170
6800		0.15	35.1	17.6	19.3	76×190
8200		0.15	29.1	14.6	21.3	76×220
10000		0.15	23.5	11.8	23.5	89×200

ALUMINIUM ELECTROLYTIC CAPACITORS

SMD

MINIATURE

BI-POLAR

STANDARD

LOW-ESR

HIGH RELIABILITY

SNAP-IN

SCREW