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- 耐高纹波,长寿命,105°C 5000小时,
可用于大功率电源、UPS不间断电源、变频器等电路中。
High ripple current ,Long life ,Load life of 5000 hours at 105°C.
Used large power source,Uninterruptible power supplies ,Frequency converter circuit .etc.
- ROHS指令已对应完毕。Adapted to the ROHS directive

主要技术性能 Specifications

项目 Items	特性 Performance Characteristics				
使用温度范围 Operating Temperature Range	-25°C ~+105°C				
额定电压范围 Rated Voltage Range	350 ~450V				
标称容量允许偏差 Nominal Capacitance Tolerance	±20% (+20°C , 120Hz)				
漏电流 Leakage Current	$I < 0.01CV(\mu A)$ 或5mA 5分钟 取较小值 (at 20°C,after 5 minutes ,Whichever is smaller)				
损耗角正切值(tgδ) Dissipation Factor(+20°C, 120Hz)	≤0.15				
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>350 ~ 450</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>8</td> </tr> </table>	Rated Voltage (V)	350 ~ 450	Z-25°C/Z+20°C	8
Rated Voltage (V)	350 ~ 450				
Z-25°C/Z+20°C	8				
高温贮存 Shelf Life	+105°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 +105°C, UR to be applied for 30 minutes and then resumed for 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value				

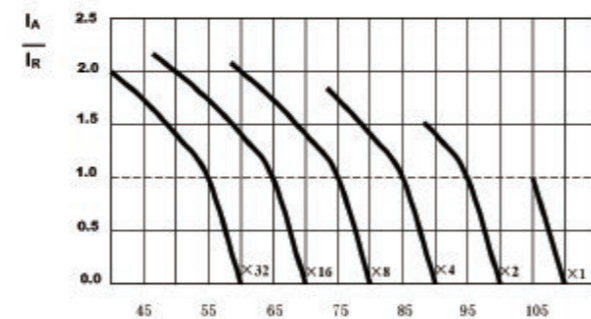
	使用寿命(Useful Life)		负载寿命(Load Life)	耐久性测试(Endurance Test)
寿命时间(Lifetime)	9000h	> 200000h	5000h	5000h
漏电流(Leakage Current)	≤初始规定值 Not more than specified value		≤初始规定值 Not more than specified value	≤初始规定值 Not more than specified value
电容量变化率(Capacitance Change)	±30%初始测量值内 Within ±30% initial value		±20%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) 应用电压(Applied Voltage) 应用电流(Applied Current) 应用温度(Applied Temperature) 失效率(Outlier Percentage)	U_R I_R 105°C ≤1%	U_R $1.2 \times I_R$ 50°C ≤1%	U_R I_R 105°C 0%	U_R $I_R=0$ 105°C IEC60384

纹波电流的相关参数 Multiplier for Ripple Current

频率系数 Frequency Coefficient

Frequency (Hz)	50	100 (120)	300	1k	≥10K
Rated Voltage (V)					
350~450	0.80	1.00	1.10	1.25	1.50

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.



尺寸 Dimensions

Rated Voltage	Surge Voltage	Rated Capacitance	Dissipation Factor MAX	Max ESR 20°C , 120Hz	Typ ESR 20°C , 120Hz	Max Ripple Current 105°C,120Hz	SIZE
(V.D.C)	(V.D.C)	(µF)	-	(mΩ)	(mΩ)	(Arms)	D×L(mm)
350	400	1000	0.15	150	100	4.2	51×80
		1500	0.15	105	70	5.2	51×80
		2200	0.15	71	47	7.0	51×105
		2700	0.15	59	39	7.2	63.5×90
		3300	0.15	50	33	8.5	63.5×110
		3900	0.15	44	29	9.6	63.5×120
		4700	0.15	38	25	11.5	63.5×145
		4700	0.15	38	25	11.5	76×115
		5600	0.15	30	20	13.4	76×130
		6800	0.15	26	17	15.2	76×150
		8200	0.15	20	13	18.4	76×170
		8200	0.15	18	12	18.4	89×145
		10000	0.15	17	11	21.2	76×200
		10000	0.15	17	11	21.0	89×155
400	450	1000	0.15	150	100	4.3	51×80
		1500	0.15	98	65	5.8	51×105
		2200	0.15	59	39	7.6	51×130
		2200	0.15	68	45	7.6	63.5×105
		2700	0.15	53	35	7.9	63.5×115
		3300	0.15	44	29	9.2	63.5×130
		3300	0.15	44	29	9.4	76×105
		3900	0.15	36	24	10.8	76×120
		4700	0.15	30	20	12.6	76×145
		5600	0.15	26	17	14.5	76×155
		6800	0.15	23	15	17.3	76×190
		6800	0.15	21	14	17.8	89×155
		8200	0.15	20	13	20.0	76×220
		8200	0.15	18	12	20.2	89×170
10000	0.15	15	10	23.2	89×190		
450	500	1000	0.15	143	95	4.7	51×105
		1500	0.15	95	63	6.2	51×120
		2200	0.15	65	43	7.3	63.5×120
		2700	0.15	50	33	8.2	63.5×130
		3300	0.15	41	27	10.3	76×130
		3900	0.15	35	23	11.6	76×150
		4700	0.15	30	20	13.6	76×170
		5600	0.15	26	17	15.5	76×190
		5600	0.15	24	16	15.5	89×150
		6800	0.15	21	14	18.3	76×220
		6800	0.15	20	13	18.3	89×175
		8200	0.15	15	10	22.5	89×220
		10000	0.15	12	8	25.2	89×235

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- 耐高纹波,长寿命,85°C 10000小时,
可用于大功率电源、UPS不间断电源、变频器等电路中。
High ripple current ,Long life ,Load life of 10000 hours at 85°C.
Used large power source,Uninterruptible power supplies ,Frequency converter circuit .etc.
- ROHS指令已对应完毕。Adapted to the ROHS directive

主要技术性能 Specifications

项目 Items	特性 Performance Characteristics				
使用温度范围 Operating Temperature Range	-25°C ~+85°C				
额定电压范围 Rated Voltage Range	400 ~450V				
标称容量允许偏差 Nominal Capacitance Tolerance	±20% (+20°C , 120Hz)				
漏电流 Leakage Current	$I < 0.01CV(\mu A)$ 或 $5mA$ 5分钟 取较小值 (at 20°C,after 5 minutes ,Whichever is smaller)				
损耗角正切值(tgδ) Dissipation Factor(+20°C, 120Hz)	≤0.15				
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>400 ~450</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>8</td> </tr> </table>	Rated Voltage (V)	400 ~450	Z-25°C/Z+20°C	8
Rated Voltage (V)	400 ~450				
Z-25°C/Z+20°C	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_R to be applied for 30 minutes and then resumed for 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value				

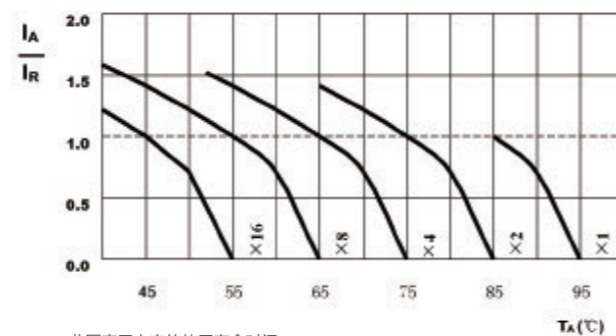
	使用寿命(Useful Life)		负载寿命(Load Life)	耐久性测试(Endurance Test)
寿命时间(Lifetime)	15000h	> 150000h	10000h	10000h
漏电流(Leakage Current)	≤初始规定值 Not more than specified value		≤初始规定值 Not more than specified value	≤初始规定值 Not more than specified value
电容量变化率(Capacitance Change)	±30%初始测量值内 Within ±30% initial value		±25%初始测量值内 Within ±25% 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		≤2.5倍初始规定值 Not more than 250% of specified value	≤1.3倍初始规定值 Not more than 130% of specified value
应用条件(Condition) 应用电压(Applied Voltage) 应用电流(Applied Current) 应用温度(Applied Temperature) 失效率(Outlier Percentage)	U_R I_R 85°C ≤1%	U_R $1.4 \times I_R$ 40°C ≤1%	U_R I_R 85°C 0%	U_R $I_R=0$ 85°C IEC60384

纹波电流的相关参数 Multiplier for Ripple Current

频率系数 Frequency Coefficient

Rated Voltage (V) \ Frequency (Hz)	50	100 (120)	300	1k	≥10K
400~450	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.



尺寸 Dimensions

Rated Voltage	Surge Voltage	Rated Capacitance	Dissipation Factor MAX	Max ESR 20°C , 120Hz	Typ ESR 20°C , 120Hz	Max Ripple Current 85°C,120Hz	SIZE
(V.D.C)	(V.D.C)	(μF)	-	(mΩ)	(mΩ)	(Arms)	D×L(mm)
400	450	1500	0.15	141	75.2	6.8	51×115
		2200	0.15	96.5	51.3	8.3	51×115
		3300	0.15	64.3	34.2	11.0	63.5×115
		3900	0.15	54.4	28.9	12.4	63.5×130
		4700	0.15	45.2	24.0	14.4	76×115
		5600	0.15	37.9	20.1	16.3	76×130
		6800	0.15	31.2	16.6	18.9	76×155
		8200	0.15	25.9	13.8	21.5	76×170
		10000	0.15	21.2	11.3	25.2	89×155
		12000	0.15	16.5	9.5	29.1	89×195
450	500	1500	0.15	159	79.6	6.5	51×115
		2200	0.15	108	54.3	8.8	63.5×95
		3300	0.15	72.4	36.2	11.5	63.5×130
		3900	0.15	61.2	30.6	13.1	76×115
		4700	0.15	50.8	25.4	14.8	76×130
		5600	0.15	42.7	21.3	16.8	76×155
		6800	0.15	35.1	17.6	20.1	76×170
		8200	0.15	29.1	14.6	23.1	89×155
		10000	0.15	23.5	11.8	26.8	89×195
		12000	0.15	16.5	9.4	31.5	89×235

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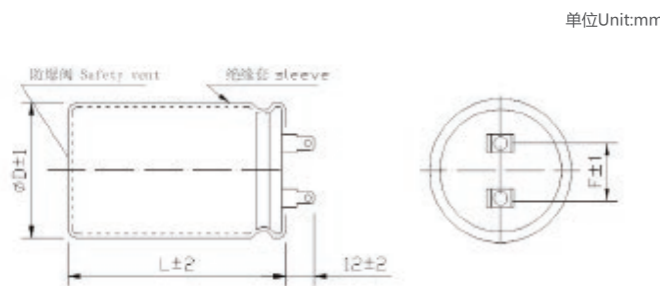


- 高纹波,85°C 2000小时,可用于变频空调、变极器。
High ripple current ,Load life of 2000 hours at 85°C.
Used for air conditioner , general-purpose inverter.
- ROHS指令已对应完毕。
Adapted to the ROHS directive

主要技术性能 Specifications

项目 Items	特性 Performance Characteristics
使用温度范围 Operating Temperature Range	-25°C ~+85°C
额定电压范围 Rated Voltage Range	400 ~450V
标称容量允许偏差 Nominal Capacitance Tolerance	±20% (+20°C , 120Hz)
漏电流 Leakage Current	I ≤0.01CV(μA)或5mA 5分钟 取较小值 (at 20°C,after 5 minutes ,Whichever is smaller)
损耗角正切值(tgδ) Dissipation Factor(+20°C, 120Hz)	小于图表中规定的数值 Less than the value specified in the standard products tables
耐久性 Load Life	+85°C施加额定电压2000小时, 恢复16小时后: After applying rated voltage for 2000 hours at +85°C and then resumed for 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2 times of the initial specified value
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, UR to be applied for 30 minutes and then resumed for 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2 times of the initial specified value

外形图 Case Table



单位Unit:mm

ΦD	50	63.5
F	20	25

允许纹波电流的修正系数 Frequency Coefficient

Frequency(Hz)	50 , 60	120	300	1k	≥10K
Factor	0.70	1.0	1.10	1.30	1.40

环境温度的修正系数 Temperature coefficient

Temperature(°C)	+40	+60	+70	+85
Factor	2.7	2.02	1.67	1.0

尺寸 Dimensions

Rated Voltage	Surge Voltage	Rated Capacitance	Leakage Current MAX(mA)	Dissipation Factor MAX	Ripple Current 85°C 120Hz(Arms)	Size
						ΦD×L(mm)
400	450	680	2.72	0.20	2.7	50×65
		820	3.28	0.20	3.0	50×65
		1000	4.00	0.20	3.5	50×75
		1200	4.80	0.20	3.8	50×75
		1500	5.00	0.20	4.7	50×95
		1800	5.00	0.20	5.1	50×95
		2200	5.00	0.20	6.2	50×120
		2500	5.00	0.20	7.0	63.5×100
		2700	5.00	0.20	7.3	63.5×95
		3300	5.00	0.20	7.9	63.5×105
		3900	5.00	0.20	9.0	63.5×120
		420	470	680	2.86	0.20
820	3.44			0.20	3.2	50×65
1000	4.2			0.20	3.5	50×75
1200	5.00			0.20	4.2	50×75
1500	5.00			0.20	4.8	50×95
1800	5.00			0.20	5.3	50×95
450	500	2200	5.00	0.20	6.3	50×120
		2700	5.00	0.20	7.1	63.5×105
		3300	5.00	0.20	8.3	63.5×120
		3900	5.00	0.20	9.8	63.5×145
		680	3.06	0.20	2.6	50×65
		820	3.69	0.20	3.1	50×75
		1000	4.50	0.20	3.5	50×75
		1200	5.00	0.20	4.3	50×95
		1500	5.00	0.20	4.8	50×110
		1800	5.00	0.20	5.5	50×120
		2200	5.00	0.20	6.3	63.5×95