

6 标记 MARKING

6.1 在电容器体上应注明如下内容:

- | | |
|--------------------|---|
| (1) 生产厂商商标 | |
| (2) 型号-额定温度 | HF 105°C |
| (3) 周期代码-我司代码-套管材质 | YyWw□PET (Yy表示年份, Ww表示制
□表示我司代码, 我司代码: “Z、Y、J、S……”
PET表示套管材质) |
| (4) 电压容量 | --V--μF |
| (5) 负极标志 | |

6.1 The Following Items Shall Be Marked Indelibly On The Capacitor:

- | | |
|--|---|
| (1) Manufacture's name or trade mark. | |
| (2) Series - rated temperature | HF 105°C |
| (3) Date code- AIHUA code -sleeve material | YyWw□PET (Yy denotes last two digit of years and Ww
denotes the week in which the capacitor been manufactured,
□denotes the code of AIHUA, AIHUA code: “ Z、Y、J、
S……” PET denotes the sleeve material) |
| (4) Voltage / Capacity | --V--μF |
| (5) Negative polarity | |

6.2 标记颜色 Color

套管颜色: 咖啡色
 标记颜色: 白
 Sleeve color: Brown
 Marking color: White

6.3纹波电流温度系数

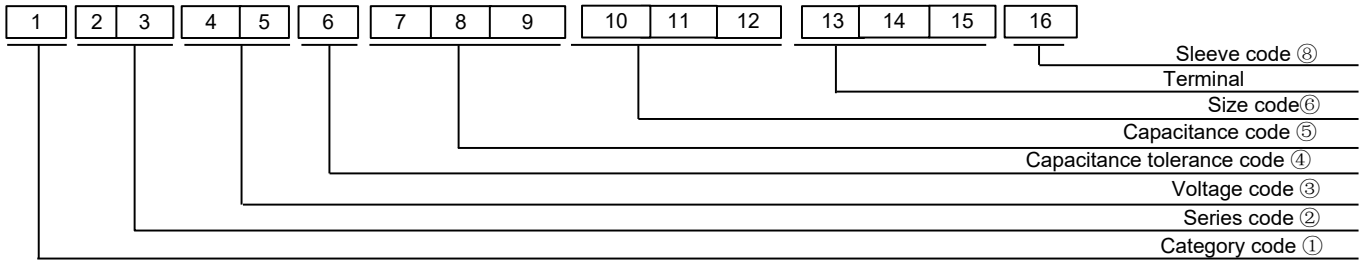
105°C max.capacitors

Capacitor ambient temperature 电容器环境温度	85°C以下	95°C	105°C
Guide limit of max.ΔTx 中心温升ΔTx最大极限值	15°C	10°C	5°C
Temperature coefficient(Actualrmsripple / Ratedrmsmax. ripple) 温度系数(实际纹波值/额定最大纹波值)	1.73	1.41	1

NOTE:Temperature coefficient is not used in life formula but for reference.

注: 温度系数不使用时在寿命计算公式中,只能作为参考。

File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	7
STANDARD MANUAL					

7 物料编码 PART NO SYSTEM

① Category code

Type	Code
	1th
Electrolytic Capacitor	E

② Series code

Series name	Code	
	2th	3th
HF	H	F

③ Voltage code

WV (V)	Code	
	4th	5th
4	0	G
6.3	0	J
10	1	A
16	1	C
25	1	E
35	1	V
40	1	G
50	1	H
63	1	J
80	1	B
100	1	K
160	2	C
180	2	L
200	2	D
220	2	N
250	2	E
315	2	F
350	2	V
380	2	P
400	2	G
420	2	T
450	2	W
500	2	H

④ Capacitance tolerance code

Tol.(%)	Code
	6th
-10~+10	K
-20~+20	M
-10~+30	Q
-10~+50	5
-10~+20	V
0~+20	A
-5~+20	C
-10~-20	B
-5~+5	D
0~+10	E
-5~-20	F
-15~+5	N

⑤ Capacitance code

Cap (μF)	Code		
	7th	8th	9th
0.10	R	1	0
0.22	R	2	2
0.33	R	3	3
0.47	R	4	7
0.68	R	6	8
1	0	1	0
2.2	2	R	2
3.3	3	R	3
4.7	4	R	7
6.8	6	R	8
10	1	0	0
22	2	2	0
33	3	3	0
47	4	7	0
68	6	8	0
100	1	0	1
220	2	2	1
330	3	3	1
470	4	7	1
680	6	8	1
1000	1	0	2
2200	2	2	2
3300	3	3	2
4700	4	7	2
6800	6	8	2
10000	1	0	3
22000	2	2	3
33000	3	3	3
68000	6	8	3

⑥ Size code

ΦD	Code	L	Code	
	10th		11th	12th
4	C	5	0	5
5	D	7	0	7
6.3	E	11	1	1
8	F	12	1	2
10	G	16	1	6
11	H	20	2	0
12	J	25	2	5
12.5	W	30	3	0
13	K	35	3	5
14	X	40	4	0
16	L	46	4	6
18	M	50	5	0
19	Z	60	6	0
20	N	80	8	0
22	O	100	A	0
25	P	115	B	5
30	Q	120	C	0
35	R	130	D	0
40	Y	140	E	0
51	S	160	G	0
63.5	T	200	K	0
76	U			
89	V			

⑦ Terminal code

Specification	Code	Size	
	13th	14th	15th
Bulk packing	O	-	-
编带Taping F=5mm (4Φ~8Φ)	P	5	0
Taping F=2.5mm (4Φ~5Φ)	X	2	5
Taped Straight-pack	B	5	0
		3	5
		2	5
		2	0
	1	5	
Lead Cut L=3.5mm	C	3	5
Lead Cut L=11.0mm	C	B	0
Lead Forming & cut L=4.5mm	F	4	5
Kink & cut L=4.5mm	J	4	5

⑧ Sleeve code

Sleeve	Code
	16th
PVC	C
PET	T

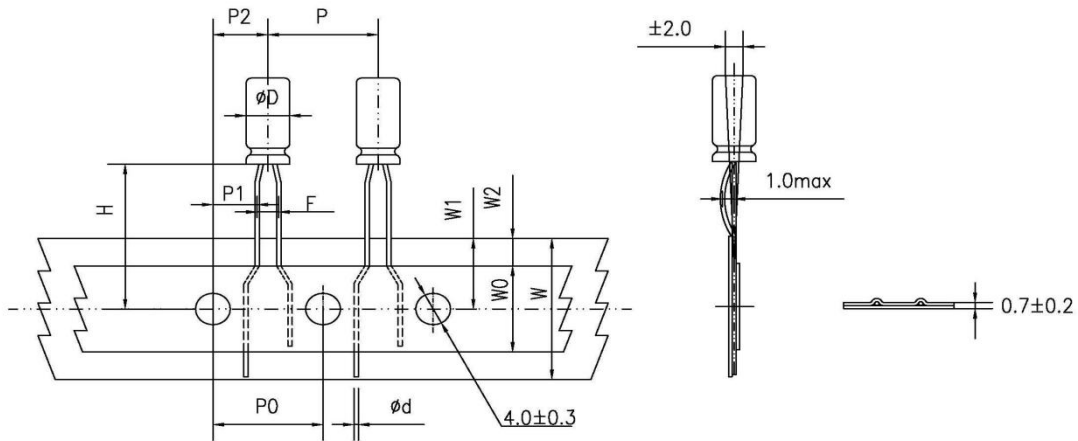
File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	8
STANDARD MANUAL					

8 加工型式 LEAD FORMING TYPE

8.1 编带 Taping

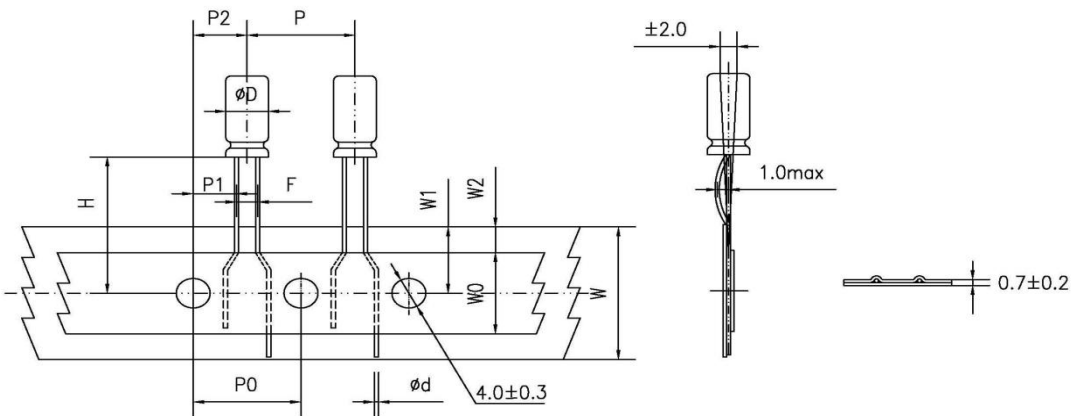
PIN code: X

$\Phi D=4\sim 5$



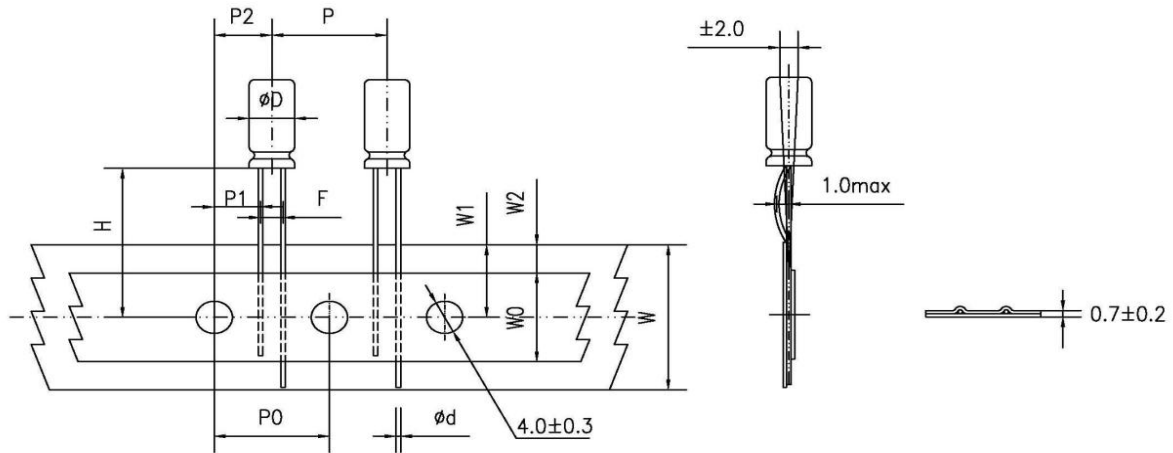
PIN code: B

$\Phi D=4\sim 8$



File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	9
STANDARD MANUAL					

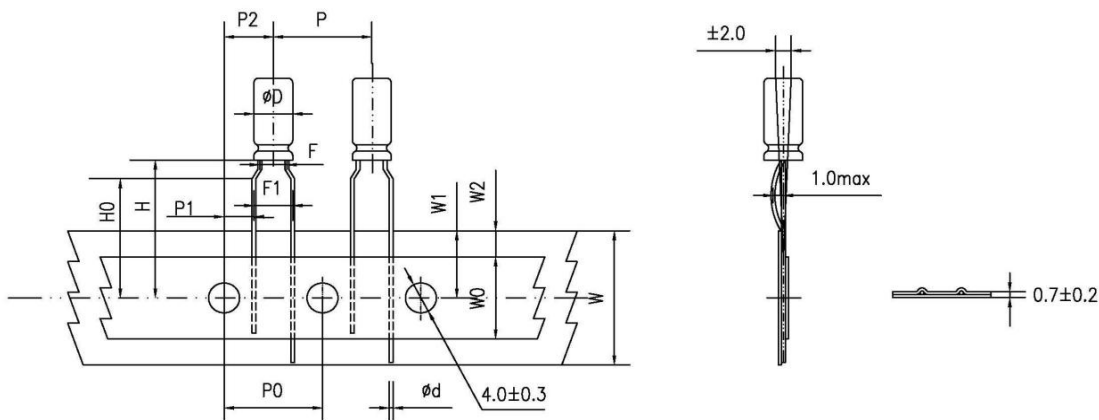
PIN code: B

 $\Phi D=10\sim 13$

DIMENSIONS(mm)

Items	Symbol	CASE SIZE										Tolerance	
		5x7		5x11		6.3x7 6.3x9 6.3x11 6.3x12	8x7 8x9 8x12	8x16 8x20	10x12 10x16 10x20	12.5x16 12.5x20 12.5x25 13x20	16x20 16x25		18x20 18x25
Lead forming symbol		X	B	X	B	B	B	B	B	B	B	B	
Lead-wire diameter	Φd	0.5		0.5		0.5	0.5	0.6	0.6	0.6	0.8	0.8	± 0.05
Pitch of componet	P	12.7		12.7		12.7	12.7	12.7	12.7	15.0	30.0	30.0	± 1.0
Feed hole pitch	P0	12.7		12.7		12.7	12.7	12.7	12.7	15.0	15.0	15.0	± 0.2
Hole center to lead	P1	5.1	5.35	5.1	5.35	5.1	4.6	4.6	3.85	5.0	3.75	3.75	± 0.7
Hole center to component	P2	6.35		6.35		6.35	6.35	6.35	6.35	7.5	7.5	7.5	± 1.0
Lead to lead distance	F	2.5	2.0	2.5	2.0	2.5	3.5	3.5	5.0	5.0	7.5	7.5	± 0.5
Height of component from tape center	H	18.5		18.5		18.5	18.5	18.5	18.5	18.5	18.5	18.5	± 0.75
Tape width	W	18.0		18.0		18.0	18.0	18.0	18.0	18.0	18.0	18.0	± 0.5
Hold down tape width	W0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	min
Feed hole position	W1	9.0		9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	+0.75 -0.5
Hole down tape position	W2	3.0		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	max

File Description	Approval Sheet						
Component P/N	HF	Version	01	Page	10		
STANDARD MANUAL							

Forming type
PIN code: P
ΦD=4~8



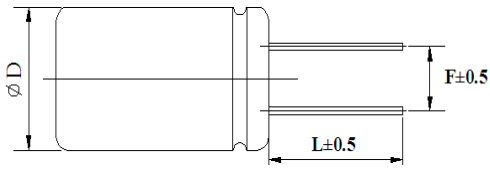
DIMENSIONS(mm)

Items	Symbol	Case Size									Tolerance
		4x5 4x7	5x5	5x7	5x11	6.3x5	6.3x7	6.3x11	8x5 8x7 8x11 8x12	8x16 8x20	
Pin Code		P	P	P	P	P	P	P	P	P	
Lead wire diameter	Φd	0.45	0.45	0.45	0.5	0.45	0.5	0.5	0.45/0.5	0.5/0.6	±0.05
Pitch of body	P	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	±1.0
Feed hole pitch	P0	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	±0.2
Hole center to lead distance	P1	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	±0.7
Feed hole center to body center distance	P2	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	±1.0
Lead to lead distance	F	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.5	3.5	±0.5
Lead to lead distance	F1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	+0.8 -0.2
Height of body from tape center	H	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	±0.75
Lead wire clinch height	H0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	±0.5
Base tape width	W	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	±0.5
Adhesive tape width	W0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	min
Hole position	W1	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	+0.75 -0.5
Hole down tape position	W2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	max

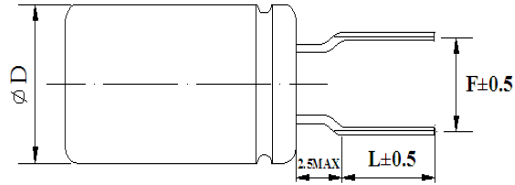
File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	11
STANDARD MANUAL					

8.2 端子切脚或成型 Lead Cut& Lead Forming

● Lead cut
PIN code: C
Range: $\Phi 4\sim\Phi 18$

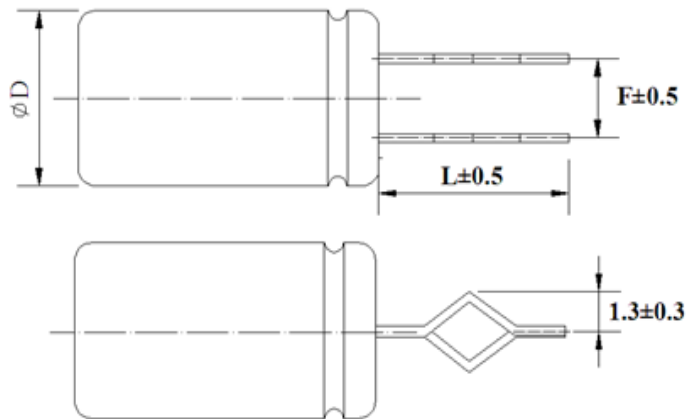


● Lead forming and cut
PIN code: F
Range: $\Phi 4\sim\Phi 8$



ΦD	F	L	ΦD	F	L
4	1.5	3.0~12.0	4	5.0	3.5, 4.5, 5.0, 7.0
5	2.0	3.0~12.0	5	5.0	3.5, 4.5, 5.0, 7.0
6.3	2.5	3.0~12.0	6.3	5.0	3.5, 4.5, 5.0, 7.0
8	3.5	3.0~12.0	8	5.0	3.5, 4.5, 5.0, 7.0
10	5.0	3.0~12.0	-	-	-
12.5	5.0	3.0~12.0	-	-	-
16	7.5	3.0~12.0	-	-	-
18	7.5	3.0~12.0	-	-	-

● Kink & Cutting
PIN code: J
Range: $\Phi 10\sim\Phi 18$



ΦD	F	L
10	5.0	4.0, 4.5, 5.0
12.5	5.0	4.0, 4.5, 5.0
16	7.5	4.0, 4.5, 5.0
18	7.5	4.0, 4.5, 5.0

File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	12
STANDARD MANUAL					

9 包装PACKING

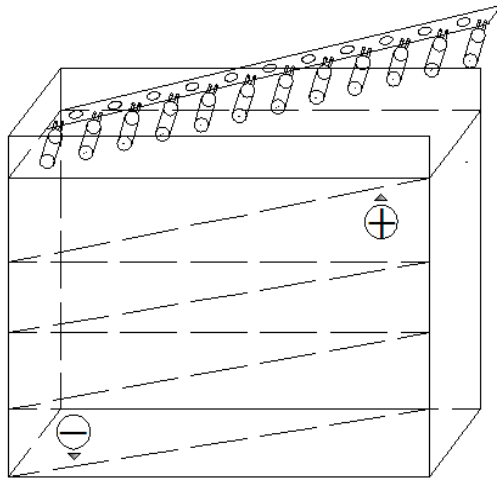
包装标签内容 Label on the packaging box or bag (The following items shall be marked on the label)

(Inside box or bag) :

1 系列 Series 2 料号 P/N 3 容量 Rated Capacitance 4 电压 Rated Voltage

5 数量 Quantity 6 尺寸 Size 7 批号 LOT Number

编带产品按下图包装 Taped Packing



散包装按下图包装方式 Bulk Packing



外箱 carton



内盒 inner box

File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	13
STANDARD MANUAL					

10 其它说明 OTHER REMARKS

10.1 铝电解电容器使用注意事项

Important Information On The Application Of Aluminium Electrolytic Capacitors

(1) 直流铝电解电容器应按正确的极性使用 DC aluminium electrolytic capacitors are normally polarized

当直流铝电解电容器按反极性接入电路时，电容器会导致电子线路短路，由此产生的电流会引致电容器损坏。若电路中有可能在负引线施加正电压，请选用无极性产品。

When reverse voltage is applied on DC aluminium electrolytic capacitor the circuit will be short out and the capacitor will be damaged due to abnormal current flows through the capacitor. Please use non-polar types of capacitors the positive voltage is applied on the cathode terminal.

(2) 在额定工作电压以下使用 Use capacitor within rated voltage

当电容器上所施加电压高于额定工作电压时，电容器的漏电流将上升，其电气特性将在短时间内劣化直至损坏。请注意电压峰值勿超出额定工作电压。

When capacitor is used at higher voltage than the rated voltage, leakage current may increase and characteristics may be deteriorated and damaged in a short period. Please take extra caution that the peak voltage should not exceed the rated voltage.

(3) 作快速充放电使用 Sudden charge and discharge

当常规电容器被用作快速充电用途,其使用寿命可能会因为容量下降,温度急剧上升等而缩减。

When aluminium electrolytic capacitors for general purpose-use are employed in rapid charge and discharge its life may be shortened resulted from capacitance decrease, heat rise, etc.

(4) 电容器储存 Storage of the capacitor

① 请保管在室温5~35℃，湿度75%以下的环境。

We recommend the following conditions for storage: Ambient temperature: 5~35°C, Ambient humidity: <75%RH;

a) 产品储存期限: ≤12个月; Storage life: ≤12 months;

b) 产品储存期限>12个月时, 需充电后再使用; If storage life>12 months, the products need to be charged again before using;

c) 存放时间超过3年的电解电容器应报废处理; If storage time >three years, the products need to be discarded;

d) 库存有效期以套管上印刷的时间开始计算; Expiry date: calculating from the date marked on the sleeve;

e) 请尽量以包装状态保管; Please keep capacitors in the original package;

f) 请避免在以下环境中保管: Avoid storing the capacitors under such circumstances:

※ 溅水、高温高湿及结露的环境。With water and oil or damp & dewing location .

※ 溅油、或者充满气体油成分的环境。With gas and oil.

※ 充满酸性有毒气体 (硫化氢, 亚硫酸, 亚硝酸, 氯, 溴, 溴化甲烷等) 的环境。

With toxic gases such as hydrogen sulfide, sulfurous acid, nitrous acid, chlorine, bromine and methane.

※ 阳光、臭氧、紫外线及放射线照射的环境。With direct sunlight, Ozone, ultraviolet rays or radiation.

② 当电容器长期储存后，漏电流会升高，温度愈高，漏电流上升愈快，因此应注意储存环境。在电容器上施加电压后，漏电流值将下降，如铝电解电容器的漏电流上升对电路有不良影响，请在使用前充电处理。

Leakage current tends to increase when capacitors have been stored for long period of time. The higher storage Temp. rise, the higher leakage current increase. Please take caution when selecting the storage location. The leakage current will decrease gradually as voltage is applied to the capacitor. The capacitor is subjected to aging before using where increased leakage may cause problems in the circuit.

(5) 施加纹波电流应小于额定值 Use capacitor within rated ripple current

施加纹波电流超过额定值后，会导致电容器体过热，容量下降，寿命缩短。电容器上标注了额定电压，请将和直流电压叠加的纹波电压的峰值控制在额定工作电压以下。

If excessive ripple current is applied on the capacitor, excessive heat will be generated inside, the capacitance be reduced and capacitor's life shall be shortened. Rated voltage has been marked on the capacitor; therefore, the peak value of the ripple voltage should be less than the rated voltage.

File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	14
STANDARD MANUAL					

(6) 使用环境温度 Ambient temperature

铝电解电容器使用寿命会受到环境温度的影响。据科学统计，使用环境温度下降10°C其使用寿命增加1倍。

Life of aluminium electrolytic capacitor is affected by the ambient temperature. It is generally known that the life doubles for each 10°C decrease in temperature.

(7) 引出线强度 Tensile strength of lead wire

当拉力施加到电容器引出线，该拉力将作用于电容器内部，这可能导致电容器内部短路，开路或漏电流上升。在电容器焊装到电路板，请勿强烈摇动电容器。

When a strong force is applied to the lead wires or terminals, stress is put on the internal connections, which may result in short circuit, open circuit or leakage current increase. Therefore it is not advisable to bend or handle a capacitor after it has been to the PC board.

(8) 焊接过程耐热性 Heat resistance at the soldering process

当电容器装至电路板浸焊或波峰焊时，其塑料套管可能因焊接时间过长、温度过高而发生破裂或二次收缩。

During soldering process, secondary shrinkage or sleeve crack may occur when soldering temperature is too high or soldering time is too long.

(9) 电路板的安装孔孔距及安装位置 Hole pitch and position of PC board

电路板安装孔的设计应与产品说明书的引线脚距相一致，如果将电容器强行插入孔距不配套的电路板，那么会有应力作用于引出线，这可能导致短路或漏电流上升。

When designing a PC board, its hole pitch should be designed to coincide with the lead pitch(lead spacing) of the specified in the catalog or specifications. When a capacitor is forcibly inserted into an unmatched hole pitch, a will put on the leads and which could result in a short circuit or increased leakage current.

(10) 关于焊接以后的清洗 Cleaning after soldering

①电容器不能用卤化有机物系列的清洗剂进行清洗。如果必须清洗，请使用能够保证电容器质量的清洗剂。

The aluminium electrolytic capacitors should be free of halogenated solvents during board cleaning after soldering. Use solvent proof capacitors when halogenated solvents are used.

②对于能够保证电容器质量的清洗剂，清洗后请不要在清洗溶液或者密封容器中保管。清洗后的电容器请和电路板一起在热风下干燥10分钟以上，热风的温度不可高于电容器规定上限温度。

After cleaned with the solvent which can guarantee the quality of capacitors, the capacitors should not be kept in solvent environments of non-ventilated places. Let the capacitors after cleaning dry with hot blast fully above 10 mins and the temperature of hot blast should not be over than specified upper limit of that of capacitors.

(11) 关于固定剂以及镀层（涂层剂） Adhesives、fixative and coating materials(coating agent)

①请不要使用含有卤化有机物系列的固定剂及镀层（涂层剂）。

Do not use halogenated adhesives and coating materials to fix aluminium electrolytic capacitors.

②请不要让固定剂及镀层（涂层剂）将电容器封口部位（端子一侧）全部封住。

Do not cover up all the sealing area of capacitors with adhesives、fixative or coating materials(coating agent),make coverage only partial.

10.2 符合 RoHS RoHS Compliance

符合欧盟RoHS的最新标准，若客户有特殊要求，按照双方签订的相关协议为准。

Completely in accordance with the latest standard of RoHS or relevant agreements reached by both parts if customer has special requirements.

File Description	Approval Sheet				
Component P/N	HF	Version	01	Page	15
STANDARD MANUAL					

标准品一览表

WV (Vdc)	Cap (μF)	Case size ΦD×L(mm)	tanδ	Ripple current (mAmps/105°C,120Hz)
160(2C)	10	10×16	0.15	128
	12	10×16	0.15	145
	15	10×20	0.15	175
	22	10×20	0.15	205
	33	10×20	0.15	250
	39	10×20	0.15	275
	47	10×20	0.15	300
	47	12.5×20	0.15	310
	56	12.5×20	0.15	350
	68	12.5×20	0.15	478
	82	12.5×20	0.15	510
	82	16×20	0.15	525
	100	12.5×25	0.15	630
	100	16×20	0.15	635
	150	16×20	0.15	770
	150	16×25	0.15	790
220	16×25	0.15	1020	
220	18×25	0.15	1045	
330	18×30	0.15	1402	
200(2D)	10	10×16	0.15	126
	12	10×16	0.15	140
	15	10×20	0.15	170
	22	10×20	0.15	205
	33	10×20	0.15	255
	33	12.5×20	0.15	265
	39	12.5×20	0.15	310
	47	12.5×20	0.15	392
	68	12.5×20	0.15	470
	68	12.5×25	0.15	485
	82	16×20	0.15	554
	100	16×20	0.15	632
	100	16×25	0.15	655
	150	16×25	0.15	840
	150	16×30	0.15	865
	150	18×25	0.15	870
220	18×25	0.15	1050	
220	18×30	0.15	1080	
330	18×35	0.15	1430	
330	18×40	0.15	1460	

WV (Vdc)	Cap (μF)	Case size ΦD×L(mm)	tanδ	Ripple current (mAmps/105°C,120Hz)
350(2V)	4.7	10×12	0.20	70
	5.6	10×12	0.20	90
	6.8	10×16	0.20	112
	10	10×20	0.20	140
	22	12.5×20	0.20	265
	33	16×20	0.20	364
	39	16×20	0.20	385
	47	16×20	0.20	430
	47	16×25	0.20	445
	68	16×25	0.20	560
	68	18×20	0.20	550
	68	18×25	0.20	570
	82	18×25	0.20	618
	100	18×25	0.20	700
	100	18×30	0.20	725
	120	18×30	0.20	836
150	18×35	0.20	970	
400(2G)	1	8×12	0.20	30
	2.2	8×12	0.20	45
	3.3	10×12	0.20	80
	4.7	10×16	0.20	100
	6.8	10×16	0.20	112
	10	10×20	0.20	144
	15	12.5×20	0.20	222
	22	12.5×20	0.20	260
	22	12.5×25	0.20	275
	33	16×20	0.20	368
	39	16×25	0.20	410
	47	16×25	0.20	470
	47	18×20	0.20	455
	47	16×30	0.20	480
	56	10×50	0.20	520
	68	12.5×40	0.20	600
	68	18×25	0.20	590
	82	12.5×45	0.20	625
	82	18×25	0.20	610
	82	18×30	0.20	630
100	12.5×50	0.20	790	
100	18×31	0.20	765	
100	18×35	0.20	785	
120	18×35	0.20	870	
150	18×40	0.20	985	

File Description

Approval Sheet

Component P/N

CRS-HF

Version

01

Page

16

STANDARD MANUAL

ALUMINUM ELECTROLYTIC CAPACITOR

WV (Vdc)	Cap (μ F)	Case size Φ D×L(mm)	$\tan\delta$	Ripple current (mA _{rms} /105°C, 120Hz)	WV (Vdc)	Cap (μ F)	Case size Φ D×L(mm)	$\tan\delta$	Ripple current (mA _{rms} /105°C, 120Hz)
250(2E)	4.7	8×12	0.15	70	450V(2W)	6.8	10×20	0.20	112
	5.6	10×12	0.15	85		10	12.5×20	0.20	185
	6.8	10×12	0.15	110		15	12.5×25	0.20	248
	10	10×20	0.15	140		22	16×20	0.20	295
	22	10×20	0.15	205		33	10×40	0.20	405
	33	12.5×20	0.15	325		33	16×25	0.20	398
	39	12.5×20	0.15	345		33	18×20	0.20	385
	47	12.5×20	0.15	390		39	10×45	0.20	425
	47	12.5×25	0.15	405		39	18×25	0.20	415
	68	16×20	0.15	528		47	12.5×40	0.20	505
	82	16×20	0.15	550		47	18×25	0.20	496
	82	16×30	0.15	570		56	12.5×40	0.20	550
	100	16×25	0.15	680		68	18×30	0.20	640
	100	18×25	0.15	700		82	12.5×50	0.20	730
	150	18×25	0.15	866		82	18×35	0.20	720
220	18×31	0.15	1130	100	18×40	0.20	808		
220	18×40	0.15	1160						

File Description	Approval Sheet				
Component P/N	CRS-HF	Version	01	Page	17
STANDARD MANUAL					

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Aluminum Electrolytic Capacitors - Leaded](#) category:

Click to view products by [Aihua](#) manufacturer:

Other Similar products are found below :

[LXY50VB4.7M-5X11](#) [MAL203125221E3](#) [MAL204216159E3](#) [ESMG101ETD100MF11S](#) [RBC-25V-10UF-4X7](#) [RE3-35V222MJ6#](#) [RFO-100V471MJ7P#](#) [B41041A2687M8](#) [B41041A7226M8](#) [B41044A7157M6](#) [EKRG250ELL100MD07D](#) [EKXG201EC3101ML20S](#)
[EKXG351ETD6R8MJ16S](#) [EKZM160ETD471MHB5D](#) [EPA-201ELL151MM25S](#) [NCD681K10KVY5PF](#) [NRLF103M25V35X20F](#)
[KM4700/16](#) [KME50VB100M-8X11.5](#) [RXJ222M1EBK-1625](#) [SG220M1CSA-0407](#) [ES5107M016AE1DA](#) [ESX472M16B](#) [MAL211929479E3](#)
[40D506F050DF5A](#) [TE1202E](#) [36DA273F050BB2A](#) [KME25VB100M-6.3X11](#) [511D336M250EK5D](#) [511D337M035CG4D](#)
[515D477M035CG8PE3](#) [052687X](#) [EKMA500ELL4R7ME07D](#) [EKRG100ETC221MF09D](#) [NRE-S560M16V6.3X7TBSTF](#)
[ERZA630VHN182UP54N](#) [MAL214099813E3](#) [MAL211990518E3](#) [MAL204281229E3](#) [NEV680M35EF](#) [686KXM050M](#) [ERS1VM222L30OT](#)
[EGW2GM150W16OT](#) [EGS2GM6R8G12OC](#) [EHS2GM220W20OT](#) [ERF1VM222L30OT](#) [ERF1KM151G20OT](#) [EKZE500ELL101MHB5D](#)
[EKMM251VSN221MP25S](#) [RGA221M1HBK-1016G](#)