

# NB 双极性标准品

- ◎ 双极性，标准品，用于极性翻转或极性变换的电路中。  
Bi-polarized Standard series, used in polarity reverse and change circuits.
- ◎ ROHS指令已对应完毕。Adapted to the ROHS directive.



## 主要技术性能 Specifications

项目 Item	特性 Performance Characteristics																														
使用温度范围 Operating temperature range	-40 ~ +85℃																														
额定电压范围 Rated voltage range	6.3 ~ 160 V																														
标称容量范围 Nominal capacitance range	0.47~ 6800 μ F																														
标称容量允许偏差 Capacitance tolerance	±20% (120Hz, +20℃)																														
正反向漏电流 Leakage current	$I \leq 0.03CV + 3(\mu A)$ 2分钟 ( at 20℃, after 2 minutes )																														
损耗角正切值 (tg δ ) Dissipation factor (+20℃, 120Hz)	<table border="1"> <thead> <tr> <th>U<sub>R</sub> (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.28</td> <td>0.24</td> <td>0.22</td> <td>0.20</td> <td>0.15</td> <td>0.14</td> <td>0.13</td> <td>0.13</td> <td>0.15</td> </tr> </tbody> </table>	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160	tg δ	0.28	0.24	0.22	0.20	0.15	0.14	0.13	0.13	0.15										
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U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160																						
Z-25℃ / +20℃	4	3	2	2	2	2	2	2	4																						
Z-40℃ / +20℃	10	8	6	5	4	4	3	3																							
耐久性 Load life	<p>+85℃加额定电压2000小时 ( 每250小时反转极性一次 ) 恢复16小时后: After applying rated voltage for 2000 hours at +85℃ ( with the polarity inverted every 250 hours ) and then resumed 16 hours:                      电容量变化率 Capacitance change : ±20%初始测量值以内 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</p>																														
高温贮存 Shelf life	<p>+85℃, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +85℃ and then resumed 16 hours:                      电容量变化率 Capacitance change : ±20%初始测量值以内 Initial measured value                      漏 电 流 Leakage current : ≤2倍初始规定值 2times of the Initial specified value                      损耗角正切值 Dissipation factor : ≤2倍初始规定值 2times of the Initial specified value</p>																														

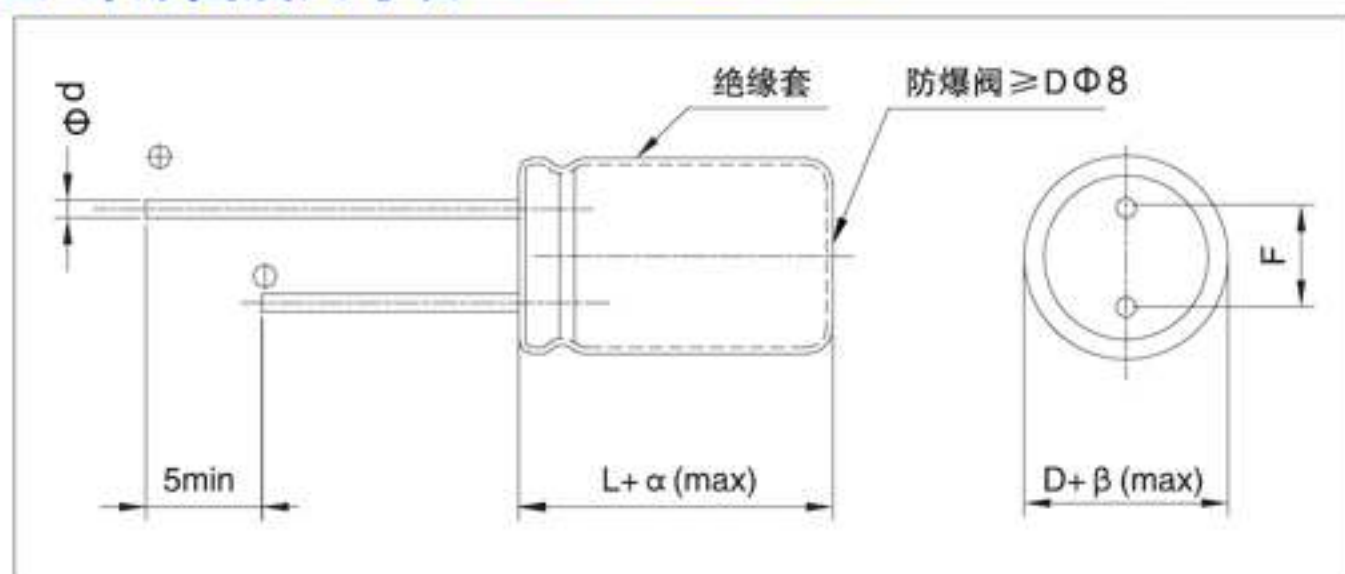
Standard

## 频率修正系数 Frequency coefficient

F(Hz)	60	120	1K	≥10k
0.47 ~ 68	0.8	1	1.45	1.7
100 ~ 470	0.8	1	1.35	1.5
680 ~ 6800	0.8	1	1.2	1.3

## 外形图及尺寸表 Case size table

单位Unit: mm



D	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5		0.5, 0.6	0.6		0.8	

α MAX	( L < 20 ) 1.5	β MAX	( D < 20 ) 0.5
	( L ≥ 20 ) 2.0		( D ≥ 20 ) 1.0



## ■ 尺寸 Dimensions

CAP(μF)		WV		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)	
				Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7	4R7											5×11	34
10	100							5×11	47	5×11	42	5×11	43
22	220			5×11	57	5×11	57	6.3×11	65	6.3×11	73		
								5×11	42				
33	330	5×11	64	5×11	64	5×11	68	6.3×11	80	8×11.5	100		
47	470	5×11	76	5×11	76	6.3×11	95	6.3×11	95	8×11.5	120		
								5×11	76				
100	101	6.3×11	125	6.3×11	125	8×11.5	160	8×11.5	160	10×16	230		
220	221	8×11.5	215	8×11.5	215	10×12.5	275	10×16	305	12.5×20	410		
330	331	8×11.5	265	10×16	345	10×16	375	12.5×20	450	12.5×20	505		
470	471	10×12.5	370	10×16	410	10×20	485	12.5×20	540	12.5×25	655		
1000	102	10×20	650	12.5×20	720	16×25	855	16×25	950	16×30	1140		
2200	222	12.5×25	1160	16×25	1280	16×30	1510	18×35	1620	18×40	1650		
3300	332	16×25	1570	16×30	1690	18×35	1980						
4700	472	16×30	2020	18×35	2160								
6800	682	18×35	2600										

CAP(μF)		WV		50V(1H)		63V(1J)		100V(2A)		160V(2C)	
				Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	R47	5×11	11			5×11	14				
1.0	010	5×11	17			5×11	21				
2.2	2R2	5×11	25			6.3×11	34				
						8×11.5	36				
3.3	3R3	5×11	27	5×11	28	6.3×11	39	10×16	49		
						8×11.5	45				
4.7	4R7	5×11	34	6.3×11	34	6.3×11	47	10×16	59		
						8×11.5	65				
6.8	6R8	5×11	38	6.3×11	42	6.3×11	48				
						8×11.5	75				
10	100	5×11	40	6.3×11	57	8×11.5	71	12.5×20	109		
		6.3×11	52								
22	220	8×11.5	89	8×11.5	95	10×16	135	12.5×25	177		
33	330	6.3×11	54	10×12.5	135	12.5×20	220	16×25	240		
		8×11.5	105								
47	470	8×11.5	110	10×16	180	12.5×20	240	16×35	329		
		10×12.5	150								
100	101	10×20	265	12.5×20	320	16×25	425	18×35	425		
220	221	12.5×25	480	16×25	575	18×35	720				
330	331	16×25	650	16×30	655						
470	471	16×30	835	18×35	965						

Size φ D×L(mm)

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz