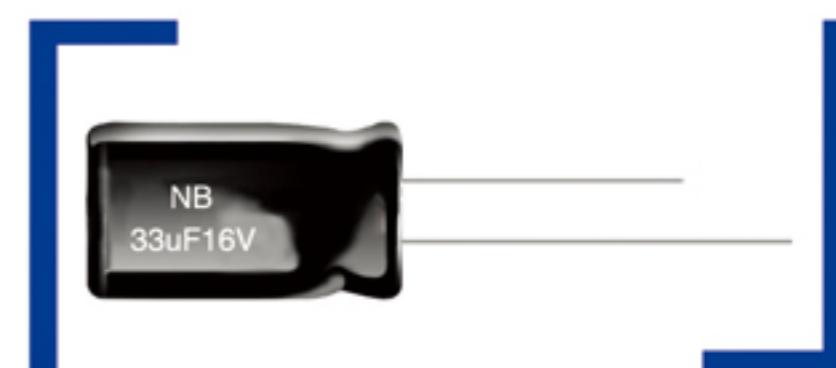


NB 双极性标准品

- ◎ 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

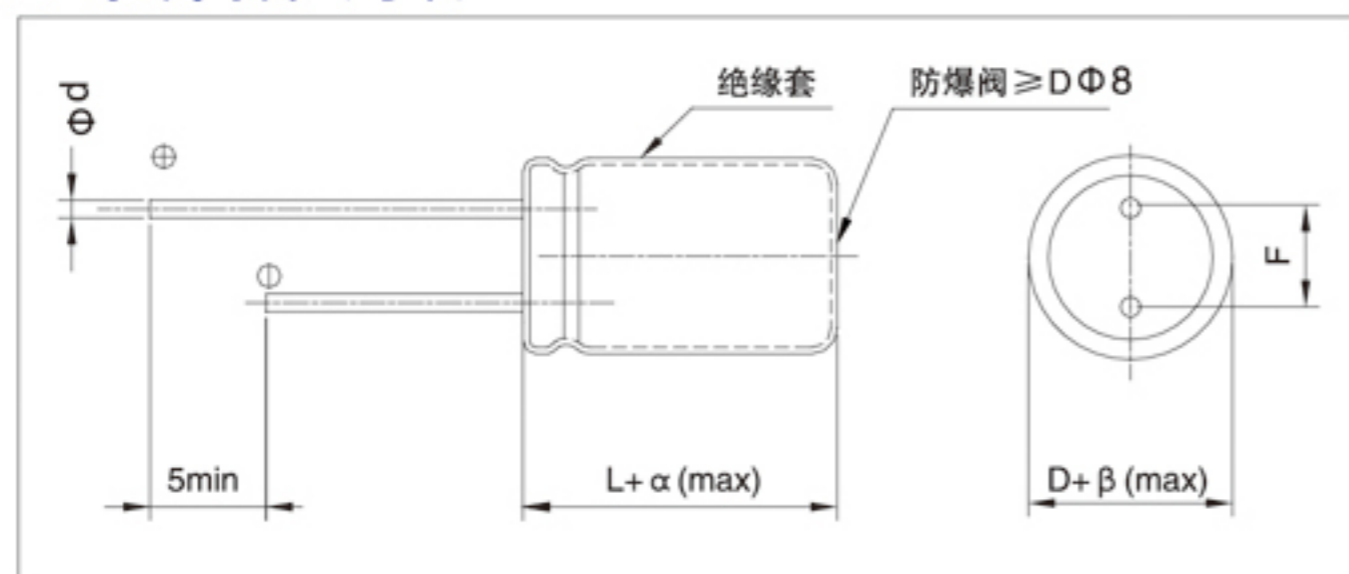
项目 Item	特性 Performance Characteristics																														
使用温度范围 Operating temperature range	-40 ~ +85°C																														
额定电压范围 Rated voltage range	6.3 ~ 160 V																														
标称容量范围 Nominal capacitance range	0.47~ 6800 μF																														
标称容量允许偏差 Capacitance tolerance	±20% (120Hz, +20°C)																														
正反向漏电流 Leakage current	$I \leq 0.03CV + 3(\mu A)$ 2分钟 (at 20°C, after 2 minutes)																														
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <tr> <td>U_R (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> </tr> <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> </table>	U _R (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										
U _R (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																						
温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>U_R (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> </tr> <tr> <td>Z-25°C / +20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> </tr> <tr> <td>Z-40°C / +20°C</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	U _R (V)	6.3	10	16	25	35	50	63	100	160	Z-25°C / +20°C	4	3	2	2	2	2	2	2	4	Z-40°C / +20°C	10	8	6	5	4	4	3	3	
U _R (V)	6.3	10	16	25	35	50	63	100	160																						
Z-25°C / +20°C	4	3	2	2	2	2	2	2	4																						
Z-40°C / +20°C	10	8	6	5	4	4	3	3																							
耐久性 Load life	<p>+85°C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°C (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°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +85°C 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 2 times of the 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>																														

频率修正系数 Frequency coefficient

F(Hz)	60	120	1K	≥10k
CAP(μF)				
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											5x11	34
10	100							5x11	47	5x11	42	5x11	43
22	220			5x11	57	5x11	57	6.3x11	65	6.3x11	73		
								5x11	42				
33	330	5x11	64	5x11	64	5x11	68	6.3x11	80	8x11.5	100		
47	470	5x11	76	5x11	76	6.3x11	95	6.3x11	95	8x11.5	120		
								5x11	76				
100	101	6.3x11	125	6.3x11	125	8x11.5	160	8x11.5	160	10x16	230		
220	221	8x11.5	215	8x11.5	215	10x12.5	275	10x16	305	12.5x20	410		
330	331	8x11.5	265	10x16	345	10x16	375	12.5x20	450	12.5x20	505		
470	471	10x12.5	370	10x16	410	10x20	485	12.5x20	540	12.5x25	655		
1000	102	10x20	650	12.5x20	720	16x25	855	16x25	950	16x30	1140		
2200	222	12.5x25	1160	16x25	1280	16x30	1510	18x35	1620	18x40	1650		
3300	332	16x25	1570	16x30	1690	18x35	1980						
4700	472	16x30	2020	18x35	2160								
6800	682	18x35	2600										

CAP(μF)		WV		50V(1H)		63V(1J)		100V(2A)		160V(2C)	
				Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	R47	5x11	11			5x11	14				
1.0	010	5x11	17			5x11	21				
2.2	2R2	5x11	25			6.3x11	34				
						8x11.5	36				
3.3	3R3	5x11	27	5x11	28	6.3x11	39	10x16	49		
						8x11.5	45				
4.7	4R7	5x11	34	6.3x11	34	6.3x11	47	10x16	59		
						8x11.5	65				
6.8	6R8	5x11	38	6.3x11	42	6.3x11	48				
						8x11.5	75				
10	100	5x11	40	6.3x11	57	8x11.5	71	12.5x20	109		
		6.3x11	52								
22	220	8x11.5	89	8x11.5	95	10x16	135	12.5x25	177		
33	330	6.3x11	54	10x12.5	135	12.5x20	220	16x25	240		
		8x11.5	105								
47	470	8x11.5	110	10x16	180	12.5x20	240	16x35	329		
		10x12.5	150								
100	101	10x20	265	12.5x20	320	16x25	425	18x35	425		
220	221	12.5x25	480	16x25	575	18x35	720				
330	331	16x25	650	16x30	655						
470	471	16x30	835	18x35	965						

Size φD×L(mm)

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