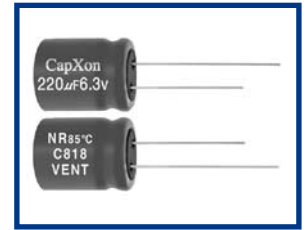


## NR Series 85°C

### Features

- ◆ Standard non polarity series for using in polarity reversal circuits.
- ◆ Design For audio equipment.
- ◆ For detail specifications, please refer to Engineering Bulletin NO.E153
- ◆ RoHS Compliant



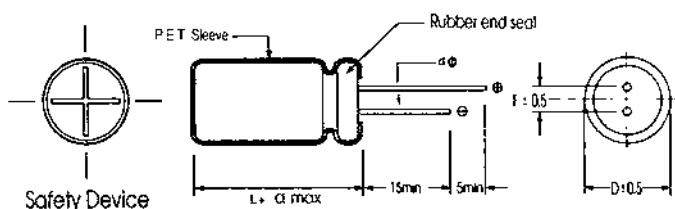
### Specifications

Item	Performance Characteristics								
Operating Temperature Range	-40~+85°C								
Rated Voltage Range	6.3~100 VDC								
Capacitance Range	0.15 to 1000 µ F								
Capacitance Tolerance	±20%(120Hz,+20°C)								
Leakage Current (+20°C,max.)	I ≤ 0.03 CV or 3 (µ A) (After 1 minute with rated working voltage applied.)								
Dissipation Factor (tan δ , at 20°C , 120Hz)	Working Voltage(VDC)	6.3	10	16	25	35	50	63	100
	D.F.(%)max.	24	20	16	16	14	12	10	10
Low Temperature Characteristics (at 120Hz)	Impedance ratio max (at: 120Hz)								
	Working voltage(VDC)	6.3	10	16	25	35	50	63	100
	Z-25°C / Z+20°C	4	3	2	2	2	2	2	2
	Z-40°C / Z+20°C	8	6	4	4	3	3	3	3
Load Life	Test condition Duration time : 2000 Hrs Ambient temperature : +85°C Applied voltage : Rated DC working voltage Each 250 hours,we will reserve the terminal and test the characteristics After test requirement at +20°C Capacitance change : within ≤ ±20% of the initial measured value Dissipation factor : ≤ 200% of the initial specified value Leakage current : ≤ The initial specified value								
Shelf Life	Test condition Duration time : 1000 Hrs Ambient temperature : +85°C Applied voltage : None After test requirement at +20°C: Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.								

### Multiplier for Ripple Current vs. Frequency

CAP(µ F)\Frequency(Hz)	50(60)	120	400	1K	10K	50K-100K
CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
10 < CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
100 < CAP ≤ 1000	0.8	1	1.16	1.25	1.35	1.38
1000 < CAP	0.8	1	1.11	1.17	1.25	1.28

### Diagram of Dimension:(unit:mm)



D φ	5	6.3	8	10	13	16
F	2.0	2.5	3.5	5.0	5.0	7.5
d φ	0.5		0.6		0.8	

## Case Size

φ D×L(mm)

WV(SV) Cap(μF)	6.3V (8)		10 (13)		16 (20)		25 (32)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7							5×11	26
10					5×11	43	5×11	44
22			5×11	60	6.3×11	71	6.3×11	71
33	5×11	62	6.3×11	70	6.3×11	90	8×11.5	110
47	6.3×11	76	6.3×11	95	8×11.5	122	10×12.5	150
100	8×11.5	154	10×12.5	188	10×12.5	208	10×16	250
220	10×12.5	245	10×16	294	10×20	360	13×25	478
330	10×16	330	10×20	360	13×20	480	13×25	615
470	10×20	360	13×20	538	13×25	638	16×25	720
1000	13×25	910	16×25	940	16×31.5	1090		

WV(SV) Cap(μF)	35 (44)		50 (63)		63 (80)		100 (125)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.15							6.3×11	13
0.47			5×11	12	6.3×11	14	6.3×11	17
1			5×11	18	6.3×11	22	6.3×11	25
1.8			5×11	22	6.3×11	26	6.3×11	32
2.2			5×11	27	6.3×11	33	6.3×11	39
3.3			5×11	29	8×11.5	36	8×11.5	49
4.7	5×11	34	6.3×11	42	8×11.5	44	10×12.5	60
10	6.3×11	48	8×11.5	65	8×11.5	73	10×16	98
22	8×11.5	96	10×12.5	118	10×12.5	125	10×20	165
33	10×12.5	135	10×16	155	10×16	170	13×20	275
47	10×12.5	154	10×20	200	10×20	215		
100	10×20	275	13×25	370	13×25	384		
220	13×25	560	16×25	645				
330	16×25	670	16×31.5	760				

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