

# NP Series

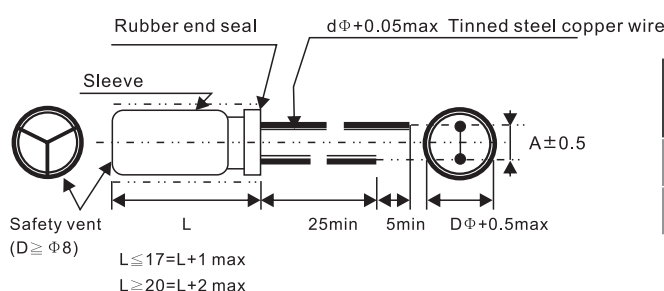


• 85°C, 2000 hours- Non-Polar series

• SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	-40 to +85°C		
Rated Voltage Range	6.3 to 100Vdc		
Capacitance Tolerance	± 20% (M) (at 20°C, 120Hz)	± 20% (M) (at 20°C, 1KHz, ΦD≥8mm)	
Leakage Current	I=0.03CV or 3 μA, whichever is greater	I=0.03CV or 5 μA, whichever is greater	
	Where, I :Max. Leakage current (μA). C : Nominal capacitance (μF) .V :Rated voltage(V) (at 20°C , after 2 minutes)		
Dissipation Factor (tan δ)	Rated voltage (Vdc)	6.3V 10V 16V 25V 35V 50V 63V 100V	
	tan δ (Max.)	0.24 0.24 0.20 0.20 0.16 0.14 0.12 0.10	
	tan δ (Max.)	0.18 0.15 0.13 0.12 0.10	
	For capacitance > 1000 uF. and 2% per another 1000uF (at 20°C)		
Low Temperature Characteristics	Impedance ration max at 120Hz		
	Working voltage	6.3v 10v 16v 25v 35v 50v 63v 100v	
	Z-25°C/ Z+20°C	4 3 2 2 2 2 2 2	
	Z-40°C/ Z+20°C	10 8 6 4 4 3 3 3	
Load. Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the voltage is applied for 2000 hours at 85°C		
	Capacitance change	≤ ±20% of the initial value	
	DF (tan δ)	≤200 % of the initial specified value	
	Leakage current	≤ The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 85°C without voltage applied.		
	Capacitance change	≤ ±20% of the initial value	
	DF (tan δ)	≤200 % of the initial specified value	
	Leakage current	≤ The initial specified value	
Ripple Current Multiplier	Temperature coefficient		
	Temperature(°C)	~55 60 70 85	
	Factor	1.65 1.50 1.30 1.00	
	Frequency coefficient		
	cap	freq	60 120 1k 10k 100k
	~47	0.75 1.00 1.35 1.50 1.50	
	100~470	0.80 1.00 1.23 1.35 1.50	
560up	0.85 1.00 1.12 1.13 1.15		

• Diagram: (Unit: mm)



Body Dia ΦD	5	6	8	10	13		16	18	22
					L ≤ 21	L ≥ 25			
Lead Dia φd	0.5		0.6		0.6	0.8	0.8	0.8	0.8
Lead Space A	2	2.5	3.5	5		7.5	7.5/10	10	



● STANDARD RATING

$\mu F$ \ Vdc	6.3		10		16		25		35		50		63		100	
0.1											5*11	3				
0.22											5*11	5				
0.33											5*11	7				
0.47											5*11	17			5*11	14
1.0											5*11	20	5*11	18	5*11	22
2.2											5*11	25	5*11	22	6.3*11	33
3.3											5*11	27	5*11	28	6.3*11 8*12	40
4.7							5*11	26	5*11	34	5*11	34	6.3*11	34	6.3*11 8*12	48
10					4*7 5*11	30 42	5*11	42	5*11	43	5*11 6.3*11	52	6.3*11	55	8*12	70
22			5*11	57	5*11	57	6.3*11	65	6.3*11	73	8*12	95	8*12	95	10*16	135
33			5*11	64	5*11	70	5*11 6.3*11	80	8*12	105	8*12	105	10*12	140	13*21	195
47			5*11	76	5*11	95	6.3*11	95	8*12	125	8*12	150	10*16	190	13*21	225
100	6.3*11	130	6.3*11	145	6.3*11 8*12	160	8*12	160	10*16	240	10*20	255	10*20 13*21	300	16*25	400
220	8*12	230	8*12	250	8*12	275	10*16	300	13*21	410	13*21 13*25	480	16*25	560	18*35	710
330	8*12	280	10*16	350	8*12	360	13*21	420	13*21	490	16*25	650	16*30	650		
470	10*12	380	10*16	415	8*12	470	13*21	540	13*25	640	16*30	830	18*35	960		
1,000	10*20	650	10*20	620	10*17	790	16*25	950	16*30	1,100						
2,200	13*25	1,150	16*25	1,240	13*21	1,350	18*36	1,550								
3,300	16*25	1,580	16*30	1,590	13*25 13*30	1,700										
4,700	16*30	2,020	18*35	1,980												
6,800	18*35	2,600														

Case size  $\Phi D \times L$  (mm)  
Rated ripple current (mA rms) at 85°C, 120Hz

Chip Type SMD  
Miniature Type  
General Purpose  
High Frequency Low Impedance  
High Voltage High Reliability  
Non-polar Type  
Large Size Snap-in  
Large Size Screw  
X Metallized Polypropylene Film Capacitors

Ripple Current : mA/rms at 120Hz 85°C



◆ NP series 85°C 無極性標準品

● STANDARD RATING

$\mu\text{F}$	Size	VV	Max Ripple Current(Arms) at 25°C, 1KHz
	D*L(m/m)		
0.47	8*12	25V、50V、63V、100V	0.8
0.82	8*11	25V、50V、63V、100V	1.8
0.82	10*15/13*25	25V、50V、63V、100V	2.0
1	10*15/13*25	25V、50V、63V、100V	2.6
1.2	10*15/13*25	25V、50V、63V、100V	3.2
1.5	10*15/13*25	25V、50V、63V、100V	4.0
1.8	10*15/13*25	25V、50V、63V、100V	4.7
2.2	10*15/13*25	25V、50V、63V、100V	5.8
2.7	10*15/13*25	25V、50V、63V、100V	6.2
3.3	10*15/13*25	25V、50V、63V、100V	7
4.7	10*15/13*25	25V、50V、63V、100V	7
5.6	10*15/13*25	25V、50V、63V、100V	7
6.8	10*15/16*36	25V、50V、63V、100V	8
8.2	10*15/16*36	25V、50V、63V、100V	8
10	13*25/18*40	25V、50V、63V、100V	12
12	13*25/18*40	25V、50V、63V、100V	12
15	13*25/18*40	25V、50V、63V、100V	12
18	13*25/22*40	25V、50V、63V、100V	13
20	13*25/22*40	25V、50V、63V、100V	13
22	13*25/22*40	25V、50V、63V、100V	13
27	13*25/22*40	25V、50V、63V、100V	13
47	22*40	25V、50V、63V、100V	13