

NK series

- On the basis of SD series ripple promotion product
- Suitable for LCD TV Power ,SMPS
- RoHS Compliance
- 高頻低阻抗,耐高紋波
- 105°C耐高溫、高紋波、長壽命。
- 適用於液晶顯示電源及開關電源等



SPECIFICATIONS

Items 項目	Characteristics 特性					
Capacitance Tolerance 靜電容量誤差	$\pm 20\%$ (120Hz,20°C)					
Operating Temperature Range 適用溫度範圍	- 40 ~ +105°C					
Rated Voltage Range 額定電壓範圍	400VDC		450VDC~500VDC			
Leakage Current 洩漏電流	$I \leq 0.03CV + 20 (\mu A)$ (After 5 minutes application of DC rated voltage, at 20 °C)					
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C					
	Rated Voltage(V)	400V	450V	500V		
	tan δ(Max)	0.15	0.18	0.20		
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF .					
Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz					
	Rated Voltage(V)	400	450	500		
	Z(-25°C)/Z(20°C)	5	6	6		
	Z(-40°C)/Z(20°C)	10	12	12		
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 3,000 hours at 105°C.					
	Capacitance Change	Within $\pm 20\%$ of Initial Value				
	tan δ	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000hours 105°C without voltage applied. Before the measurement. The capacitance shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.					
	Capacitance Change	Within $\pm 20\%$ of Initial Value				
	tan δ	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Standards 參照標準	JIS C 5101-4-1(IEC 60384)					

Frequency Coefficient of Permissible Ripple Current

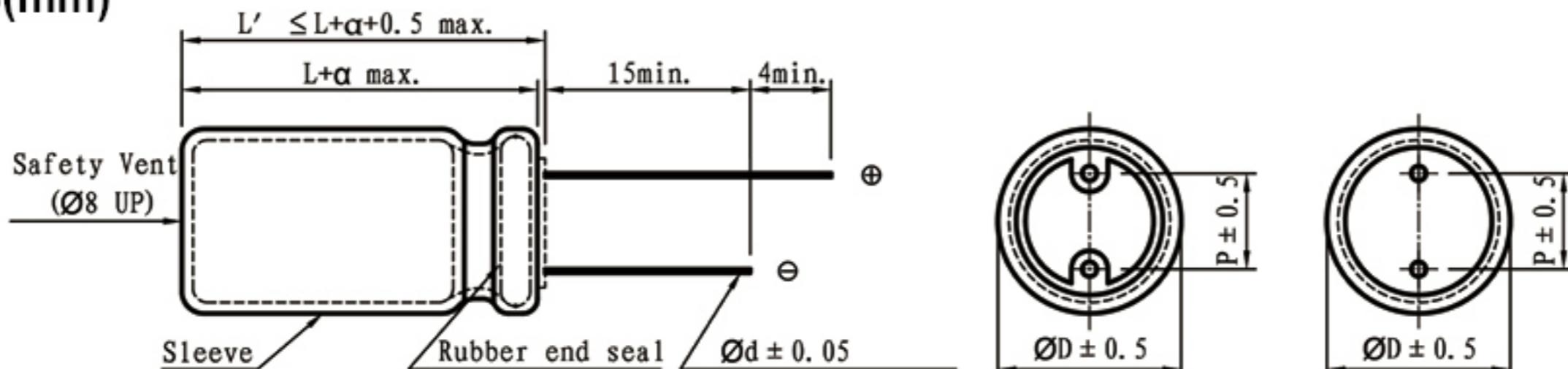
Frequency (Hz)	50	120	1K	10K	100K
Coefficient	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use. The rms ripple current has to be reduced.

NK

NK series

DIMENSIONS(mm)



ϕD	6.3	8	10	13	16	18
P	2.5	3.5	5.0	5.0	7.5	7.5
ϕd	0.5	0.5	0.6	0.6	0.8	0.8

$$\alpha \quad (L < 16) 1.0 \\ (L \geq 16) 2.0$$

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 100KHz ; IMP (Ω max) at 20°C 100KHz

Cap (μF)	V	400			450			500		
		Item	D × L	IMP	R.C.	D × L	IMP	R.C.	D × L	IMP
4.7		6.3x12	9.5	120	6.3x16	15.6	115	6.3x16	17.4	82
					8x10	15.6	115	8x10	15.2	82
6.8	6.3x13	8.3	130	10x10	12.7	130	10x10	15.2	90	
8.2	6.3x15	7.5	175	8x12	9.2	165	10x11	11.1	115	
10				8x15	8.1	195	10x13	9.8	150	
		8x10	5.3	195	10x11	8.1	195			
12	8x13	4.1	235	10x13	6.3	230	10x14	7.5	210	
15	8x15	3.9	265	10x13.5	6.0	255	10x15	7.2	225	
18	8x17	3.1	300	10x15	5.7	300	10x17	6.5	245	
22		10x14	3.0	315	10x17	5.4	315	13x17	5.6	315
		8x18	3.0	315						
27	10x15	3.0	375	10x20	4.5	375	10x23	5.3	350	
33	10x18	2.5	445	10x35	3.1	445	13x21	4.1	405	
47	13x19	1.9	620	10x45	2.6	620	16x20	3.1	565	
68	16x20	1.4	1010	10x50	1.6	1010	18x20	2.2	815	
82	18x20	1.0	1200	16x25	1.3	1200	18x25	1.9	980	
100	18x25	0.9	1350	18x25	1.0	1250				

※ 13mm may be replaced by 12.5mm upon customer's request.