

NK series

Features

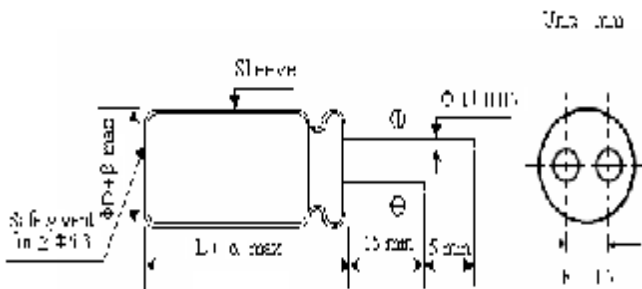
- ◆ Standard Nonpolar, series for entertainment electronics, 2000 hours at 105°C.
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics								
Temperature Range	-40~+105°C								
Rated Voltage Range	6.3~100Vdc								
Capacitance Range	1.0~1000μF								
Capacitance Tolerance	±20% (120Hz, +20°C)								
Leakage Current (+20°C,max.)	I≤0.03CV 或 3 (μA) After 5 minutes, whichever is greater measured with rated working voltage applied								
Dissipation Factor(tgδ) 120Hz, +20°C	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100
	D.F.(%)max.	26	24	22	20	16	14	12	10
For capacitance>1000μF , Add 2% per another 1000μF (120Hz, +20°C)									
Low Temperature Characteristics(120Hz)	Impedance ratio max.								
	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	
For capacitance>1000μF , Add 0.5 per another 1000μF For Z-25°C/ Z+20°C,Add 1.0 per another 1000μF For Z-40°C/ Z+20°C									
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C(The polarity shall be reversed every 250 hours).								
	Capacitance Change	≤±20% of the initial value							
	D.F.(tgδ)	≤200% of the initial specified value							
Leakage Current	≤The initial specified value								
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the load life characteristics listed above.								
Others	JISC-5101(IEC 60384)								

Diagram of Dimensions



Frequency Multipliers

μF \ Hz	50	120	300	1K	10K~
<68	0.75	1.00	1.35	1.57	2.00
68~470	0.80	1.00	1.23	1.34	1.50
>470	0.85	1.00	1.10	1.13	1.15

ΦD	5	6.3	8	10	13	16
F	2.0	2.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8
α	(L< 20) + 1.5		(L≥20) + 2.0			
β	(D< 20) + 0.5		(D≥20) + 1.0			

NK series**Standard Ratings**

Voltage	6.3V		10V		16V		25V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
4.7							5×11	23
10					5×11	30	5×11	34
22			5×11	42	6.3×11	51	6.3×11	55
33	5×11	46	6.3×11	57	6.3×11	63	8×12	79
47	6.3×11	61	6.3×11	67	8×12	89	10×12	100
100	8×12	104	10×12	125	10×12	139	10×17	164
220	10×12	168	10×17	204	10×20	279	13×25	336
330	10×17	229	10×20	275	13×20	346	13×25	414
470	10×20	300	13×20	371	13×25	460	16×25	543
1000	13×25	550	16×25	688	16×25	746	16×30	871

Voltage	35V		50V		63V		100V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
1.0			5×11	12	5×11	18	5×11	15
2.2			5×11	18	5×11	22	6.3×11	22
3.3			5×11	22	6.3×11	26	8×12	32
4.7	5×11	25	6.3×11	29	6.3×11	31	8×12	39
10	6.3×11	40	8×12	51	8×12	53	10×12	64
22	8×12	68	10×12	82	10×17	96	10×20	114
33	10×12	89	10×17	107	10×20	129	13×20	164
47	10×12	111	10×20	146	10×20	157	13×25	200
100	10×20	196	13×25	264	13×25	275	16×25	304
220	13×25	364	16×25	443	16×30	486		
330	16×25	493	16×30	593				
470	16×25	586						

Max Allowable Ripple Current (mA,rms) at 105°C 120Hz,Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.