

NZH Series

• 105°C 2,000Hrs assured.

- Non-solvent proof
- High ripple and High surge voltage
- For LED TV Power , SMPS
- **RoHS compliant.**
- **Halogen-free capacitors are also available.**



SPECIFICATIONS

Item	Characteristics											
Rated Voltage	450 V _{DC}											
Surge Voltage	550 V _{DC}											
Operating Temperature Range	-25 ~ +105°C											
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)											
Leakage Current	<table border="1"> <thead> <tr> <th>CV</th> <th>Time</th> <th>After 1 minute</th> <th>After 5 minutes</th> </tr> </thead> <tbody> <tr> <td rowspan="2">≤ 1000</td> <td></td> <td>I=0.1CV+40</td> <td>I=0.03CV+15</td> </tr> <tr> <td></td> <td>I=0.04CV+100</td> <td>I=0.02CV+25</td> </tr> </tbody> </table> <p>Where, I : Max. Leakage current(μA) C : Nominal capacitance(μF) V : Rated voltage(V_{DC}) (at 20°C)</p>	CV	Time	After 1 minute	After 5 minutes	≤ 1000		I=0.1CV+40	I=0.03CV+15		I=0.04CV+100	I=0.02CV+25
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≤ 1000		I=0.1CV+40	I=0.03CV+15									
		I=0.04CV+100	I=0.02CV+25									
Dissipation Factor(Tanδ)	<table border="1"> <thead> <tr> <th>Rated Voltage(V_{DC})</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Tanδ(Max.)</td> <td>0.24</td> </tr> </tbody> </table> <p>(at 20°C, 120Hz)</p>	Rated Voltage(V _{DC})	450	Tanδ(Max.)	0.24							
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Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <thead> <tr> <th>Rated Voltage(V_{DC})</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>6</td> </tr> </tbody> </table> <p>(at 120Hz)</p>	Rated Voltage(V _{DC})	450	Z(-25°C)/Z(20°C)	6							
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Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied for 2,000 hours at 105°C.</p> <p>Capacitance change ≤ ±20 % of the initial value tan δ ≤ 200 % of the initial specified value Leakage current ≤ The initial specified value</p>											
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.</p> <p>Capacitance change ≤ ±20 % of the initial value tan δ ≤ 200 % of the initial specified value Leakage current ≤ 500 % of the initial specified value</p>											
Others	Satisfied characteristics KS C IEC 60384-4											

DIMENSIONS OF NZH Series

Unit(mm)

Marking : DARK BLUE SLEEVE, SILVER INK

øD	8	10	12.5	16	18
ød	0.6	0.6	0.6	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5
øD'	øD + 0.5 max.				
L'	L + 2.0 max				

※ ø16 x 60L, L' ≤ L+3.0

RATINGS OF NZH Series

V _{dc}	450	
Items μF	∅D×L(mm)	Rated Ripple Current (mA _{rms} /105°C, 120Hz)
18	8 X 50	240
39	10 X 50	400
47	12.5 X 40	460
	16 X 25	460
56	12.5 X 50	550
	16 X 31.5	550
	18 X 25	550
68	12.5 X 50	690
	16 X 35.5	690
	18 X 31.5	690
82	12.5 X 60	750
	16 X 40	750
	18 X 31.5	750
100	16 X 45	800
	18 X 35.5	800
120	16 X 50	950
	18 X 40	950
150	16 X 60	1,300
	18 X 50	1,300

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz) Cap.(μF)	120	1k	10k	50k	100k
18 ~ 150	1.00	1.25	1.50	1.75	2.00