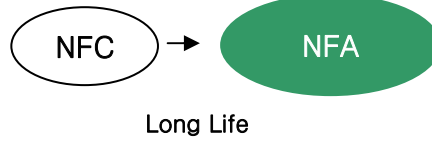


NFA Series

● 105°C 7,000~10,000Hrs assured.

- Non-solvent proof
- High ripple and long life
- For Ballasts stabilizer
- RoHS compliant.
- Halogen-free capacitors are also available.



SPECCIFICATIONS

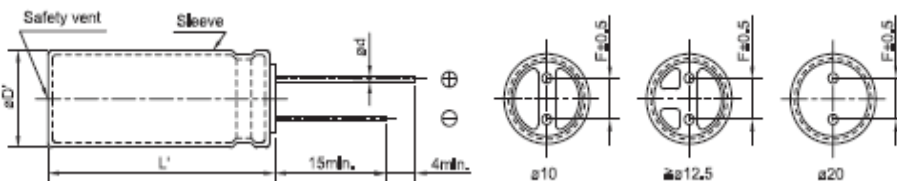
Item	Characteristics													
Rated Voltage Range	160 ~ 400 V _{DC}	450 ~ 500 V _{DC}												
Operating Temperature Range	-40 ~ +105°C	-25 ~ +105°C												
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)													
Leakage Current	<table border="1"> <tr> <td>Time</td> <td>After 1 minute</td> <td>After 5 minute</td> </tr> <tr> <td>C-V</td> <td></td> <td></td> </tr> <tr> <td>≤ 1000</td> <td>I = 0.1CV + 40</td> <td>I = 0.03CV + 15</td> </tr> <tr> <td>> 1000</td> <td>I = 0.04CV + 100</td> <td>I = 0.02CV + 25</td> </tr> </table>		Time	After 1 minute	After 5 minute	C-V			≤ 1000	I = 0.1CV + 40	I = 0.03CV + 15	> 1000	I = 0.04CV + 100	I = 0.02CV + 25
	Time	After 1 minute	After 5 minute											
	C-V													
≤ 1000	I = 0.1CV + 40	I = 0.03CV + 15												
> 1000	I = 0.04CV + 100	I = 0.02CV + 25												
Where, I : Max. Leakage current(μA) C : Nominal capacitance(μF) V : Rated voltage(V _{DC}) (at 20°C)														
Dissipation Factor (tan δ)	Rated Voltage(V _{DC})	160 ~ 250 350 ~ 500												
	Tanδ(Max.)	0.20 0.24												
(at 20°C, 120Hz)														
Temperature Characteristics (Capacitance change ratio)	Rated Voltage(V _{DC})	160 ~ 250 350 ~ 400 450 ~ 500												
	Z(-25°C) / Z(+20°C)	3 5 6												
	Z(-40°C) / Z(+20°C)	6 6 -												
(at 120Hz)														
Load Life	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 10,000 hours at 105°C. (Where , 7,000 hours for 8Φ , 8,000 hours for 10Φ)													
	Capacitance change	≤ ±20 % of the initial value												
	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 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.													
	Capacitance change	≤ ±20 % of the initial value												
	tan δ	≤ 200 % of the initial specified value												
	Leakage current	≤ 500 % of the initial specified value												
Others	Satisfied characteristics KS C IEC 60384-4													

* Please refer each approval sheet for detail specification.

DIMENSIONS OF NFA Series

Unit (mm)

Marking : DARK BROWN SLEEVE , SILVER INK



ΦD	8	10	12.5	16	18	20	22
Φd	0.6	0.6	0.6	0.8	0.8	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5	7.5	10.0
ΦD'	ΦD + 0.5max.						
L'	L + 1.5max.			L + 2.0max.			



RATINGS OF NFA Series

V_{DC}		160		200	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)
	22		10 × 20	192	10 × 20
33		10 × 20	236	10 × 20	236
47		12.5 × 20	312	12.5 × 20	262
68		12.5 × 25	409	12.5 × 20	312
100		16 × 25	548	10 × 33	409
150		16 × 31.5	724	12.5 × 25	409
220		16 × 31.5	876	16 × 25	548
330		16 × 35.5	1,110	16 × 31.5	701
				18 × 31.5	906

V_{DC}		250		350	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)
	10		10 × 20	130	10 × 20
22		12.5 × 20	214	12.5 × 20	207
33		12.5 × 25	285	16 × 20	284
47		12.5 × 25	340	16 × 25	364
56		10 × 33	350		
68		16 × 25	452	16 × 31.5	472
100		16 × 31.5	591	18 × 31.5	591
150		18 × 25	700	18 × 40	760
220		18 × 31.5	850	22 × 45	970
330		20 × 40	1,196		

V_{DC}		400		450	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)
	2.2		8x11.5	27	
3.3		8x11.5	33	10 × 16	63
4.7		8x11.5	39	10 × 16	74
6.8		8x15	63	10 × 20	96
8.2		8x20	75	10 × 20	106
10		10 × 20	126	10 × 20	99
15		10 × 20	154	12.5 × 20	114
22		12.5 × 25	225	16 × 25	241
33		16 × 20	284	12.5 × 30	315
47		16 × 25	364	16 × 31.5	319
68		16 × 31.5	472	18 × 25	368
82		18 × 31.5	536	18 × 25	435
100		18 × 35.5	611	18 × 31.5	473
120		18 × 40	680	18 × 35.5	537
150		18 × 40	760	18 × 40	602
180		20 × 40	855	18 × 40	659
220		22 × 45	996	20 × 40	757
				22 × 50	892

V_{DC}		500	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA rms/105°C, 120Hz)
	10		12.5 × 20
22		16 × 25	228
33		18 × 25	260
47		18 × 31.5	393
68		18 × 35.5	489

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz)	120	1k	10k	50k	100k
Factor	1.00	1.25	1.50	1.60	1.75