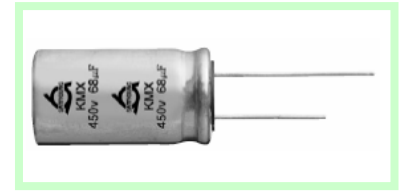
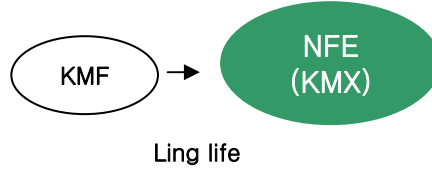


NFE(KMX) Series ● 105°C 5,000Hrs assured.

- Non-solvent proof
- High ripple
- For ballasts stabilizer.
- RoHS compliant.
- Halogen-free capacitors are also available.

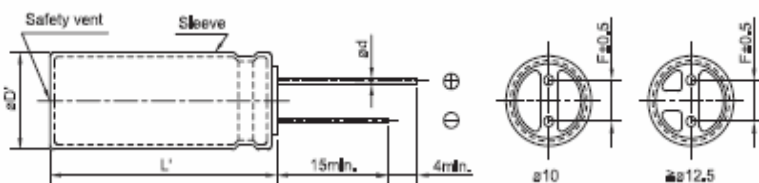


SPECCIFICATIONS

Item	Characteristics														
Rated Voltage Range	160 ~ 400 V _{DC}	450 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 rowspan="2">C-V</td> <td>Time</td> <td>After 1 minute</td> <td>After 5 minute</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>		C-V	Time	After 1 minute	After 5 minute	≤ 1000	I = 0.1CV + 40	I = 0.03CV + 15	> 1000	I = 0.04CV + 100	I = 0.02CV + 25			
	C-V	Time		After 1 minute	After 5 minute										
≤ 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)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>160 ~ 250</td> <td>350 ~ 450</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.20</td> <td>0.24</td> </tr> </table>		Rated Voltage(V _{DC})	160 ~ 250	350 ~ 450	Tanδ(Max.)	0.20	0.24							
	Rated Voltage(V _{DC})	160 ~ 250	350 ~ 450												
Tanδ(Max.)	0.20	0.24													
		(at 20 °C, 120Hz)													
Temperature Characteristics (Capacitance change ratio)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>160 ~ 250</td> <td>350 ~ 400</td> <td>450</td> </tr> <tr> <td>Z(-25°C) / Z(+20°C)</td> <td>3</td> <td>5</td> <td>6</td> </tr> <tr> <td>Z(-40°C) / Z(+20°C)</td> <td>6</td> <td>6</td> <td>-</td> </tr> </table>			Rated Voltage(V _{DC})	160 ~ 250	350 ~ 400	450	Z(-25°C) / Z(+20°C)	3	5	6	Z(-40°C) / Z(+20°C)	6	6	-
	Rated Voltage(V _{DC})	160 ~ 250	350 ~ 400	450											
	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 is applied for 5,000 hours at 105 °C.														
	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 NFE(KMX) Series



Unit (mm)

Marking : GOLD SLEEVE, BLACK INK

ΦD	10	12.5	16	18
Φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
ΦD'	ΦD + 0.5max.			
L'	L + 2.0max.			



RATINGS OF NFE(KMX) Series

V_{DC}		160		200	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)
		22	10 × 20	440	10 × 20
	33	10 × 20	565	12.5 × 20	590
	47	12.5 × 20	725	12.5 × 20	780
	68	12.5 × 25	950	12.5 × 25	950
	100	16 × 25	1,280	16 × 25	1,280
	150	16 × 31.5	1,300	16 × 25	1,300
	220	16 × 31.5	1,300	18 × 31.5	1,700
	330	18 × 31.5	1,700		

V_{DC}		250		350	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)
		10	10 × 20	300	10 × 20
	22	12.5 × 20	480	12.5 × 20	270
	33	12.5 × 25	630	16 × 20	600
	47	12.5 × 25	630	16 × 25	700
	68	16 × 25	1,000	16 × 31.5	1,100
	100	16 × 31.5	1,400	18 × 31.5	1,170
	150	18 × 31.5	1,450		
	220	18 × 40	1,485		

V_{DC}		400		450	
μF	Items	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)	$\varnothing D \times L(mm)$	Rated ripple current (mA _{rms} /105 °C, 100kHz)
		3.3			10 × 20
	4.7			12.5 × 20	200
	10	10 × 20	180	12.5 × 25	315
	22	12.5 × 25	300	16 × 25	570
	33	16 × 20	600	16 × 31.5	620
	47	16 × 25	700	18 × 25	800
				18 × 31.5	900
	68	16 × 31.5	1,100	18 × 35.5	980
	100	18 × 40	1,250		

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz)	120	1k	10k	50k	100k
Cap(μF)					
3.3 ~ 100	0.40	0.70	0.90	0.95	1.00
150 ~ 330	0.44	0.74	0.77	0.88	1.00