

# ALUMINUM ELECTROLYTIC CAPACITORS

APPROVAL NO.

13396

NXK 25 VB 470 (M)

SERIES

NXK

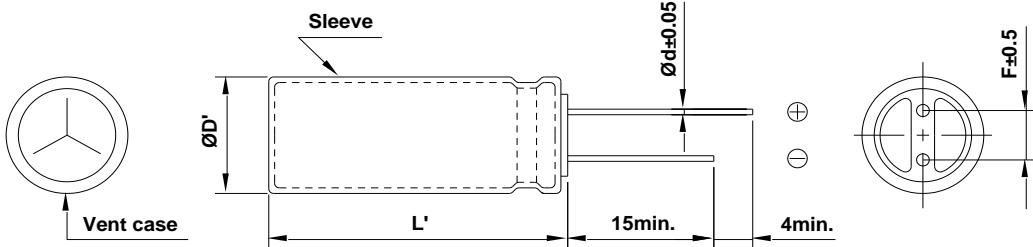
RATING

25 V 470  $\mu$ F

CASE SIZE

 $\varnothing$  10 x 16 L

## A. DIAGRAM OF DIMENSION



[ UNIT : mm ]

$\varnothing$ D	10
L	16
$\varnothing$ d	0.6
F	5.0
$\varnothing$ D'	$\varnothing$ D+0.5max.
L'	L+2.0max.

B. MARKING: YELLOW SLEEVE & BLACK INK

NXK  
25 V  
470  $\mu$ F

FRONT VIEW OF CAPACITOR

SAM YOUNG  
<M>105°C

LOT NO

BACK VIEW OF CAPACITOR

## C. ELECTRICAL CHARACTERISTICS

A. OPERATING TEMPERATURE RANGE	:	-40 ~ +105°C												
B. RATED VOLTAGE	:	25 V <sub>DC</sub>												
C. SURGE VOLTAGE	:	32 V <sub>DC</sub>												
D. CAPACITANCE TOLERANCE	:	$\pm 20\%$ at 20°C, 120Hz												
E. LEAKAGE CURRENT	:	Lower 117.5 $\mu$ A, after 2 minutes at 20°C												
F. DISSIPATION FACTOR (TAN $\delta$ )	:	Lower 0.14 at 20°C, 120Hz												
G. RATED RIPPLE CURRENT	:	2550 mArms at 105°C, 100 kHz												
H. RATED RIPPLE CURRENT MULTIPLIERS (Frequency Multipliers)	:	<table border="1"> <thead> <tr> <th>Freq.(Hz)</th> <th>120</th> <th>1k</th> <th>10k</th> <th>50k</th> <th>100k</th> </tr> </thead> <tbody> <tr> <td>Factor</td> <td>0.55</td> <td>0.77</td> <td>0.94</td> <td>0.96</td> <td>1.00</td> </tr> </tbody> </table>	Freq.(Hz)	120	1k	10k	50k	100k	Factor	0.55	0.77	0.94	0.96	1.00
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Factor	0.55	0.77	0.94	0.96	1.00									
I. TEMPERATURE CHARACTERISTIC (Max. Impedance ratio)	:	<table border="1"> <tr> <td>Z(-25°C) / Z(20°C)</td> <td>2</td> </tr> <tr> <td>Z(-40°C) / Z(20°C)</td> <td>3</td> </tr> </table>	Z(-25°C) / Z(20°C)	2	Z(-40°C) / Z(20°C)	3								
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(at 120Hz)

J. 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 (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105°C.

- # Capacitance change  $\leq$  +25 % of the initial value
- # Tan $\delta$   $\leq$  200 % of the initial specified value
- # Leakage Current  $\leq$  The initial specified value

K. 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 measurement.

- # Capacitance change  $\leq$  +25 % of the initial value
- # Tan $\delta$   $\leq$  200 % of the initial specified value
- # Leakage Current  $\leq$  The initial specified value

L. CLEANING CONDITIONS : Non solvent proof

M. OTHERS : Satisfied characteristics KS C IEC 60384-4

\* IMP(20°C, 100kHz) : 0.038  $\Omega$  ↓



SamYoung Electronics Co., Ltd.