

## K3N Miniature Aluminum Electrolytic Capacitors

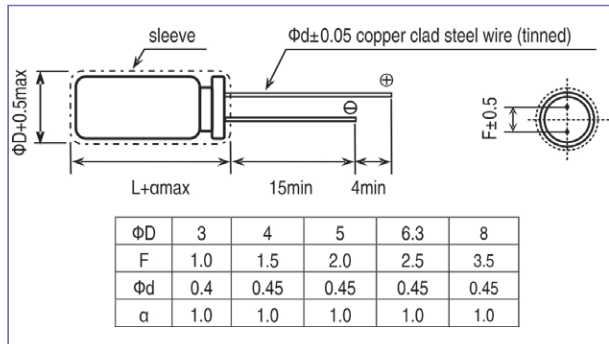
### 5mm L, Non-polar Miniature Capacitors, Series K3N.

Diameters from  $\Phi 4$  to  $\Phi 6.3$ mm and a height of 5mm

Guaranteed 1000 hours at 85°C

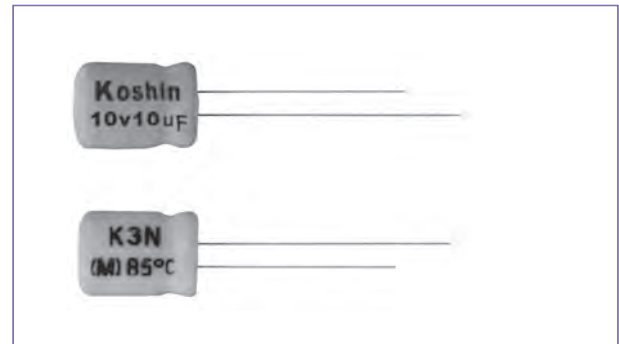
Outline Drawing

Unit: mm



Photo

RoHS



Marking color: black print on red sleeve

### Specifications

No.	Item	Performance									
1	Temperature range (°C)	-40 to +85									
2	Leakage current ( $\mu A$ )	Less than 0.03CV or 5 whichever is larger (after five minutes) C: Rated Capacitance( $\mu F$ ); V: Rated voltage(V) 20°C									
3	Capacitance tolerance (%)	$\pm 20$ (20°C, 120Hz)									
4	Tangent of the loss angle (Tan $\delta$ )	Rated voltage (V)	4	6.3	10	16	25	35	50	20°C, 120Hz	
		Tan $\delta$ (max)	0.35	0.24	0.20	0.16	0.16	0.14	0.12		
5	Stability at Low Temperature	Rated voltage (V)	4	6.3	10	16	25	35	50	120Hz	
		Impedance ratio (max)	$Z_{(-25^\circ C)} / Z_{(+20^\circ C)}$	7	4	3	2	2	2		2
			$Z_{(-40^\circ C)} / Z_{(+20^\circ C)}$	15	8	6	4	4	3		3
6	Endurance (85°C) (Applied ripple current)	Test time	1000hours (with the polarity inverted every 250 hrs)								
		Leakage current	The initial specified value or less								
		Percentage of capacitance change	Within $\pm 20\%$ of initial value								
		Tangent of the loss angle	200% or less of the initial specified value								
7	Shelf life (85°C)	Test time	500hours								
		Leakage current	The initial specified value or less								
		Percentage of capacitance change	Within $\pm 20\%$ of initial value								
		Tangent of the loss angle	200% or less of the initial specified value								
8	Applicable standards	JIS-C-5102 and JIS-C- 5141									

### Coefficient of Frequency for Ripple Current

Frequency (Hz)	50 · 60	120	1K	10K · 100K
Rated voltage (v)				
4 to 50	0.80	1.00	1.30	1.45

### Coefficient of Temperature for Ripple Current

Temperature(°C)	50 or less	60	70	85
Coefficient	1.80	1.70	1.60	1.00

## K3N Miniature Aluminum Electrolytic Capacitors

Dimension:  $\Phi$ DXL(mm)

Ripple Current: mA/rms at 120Hz,85°C

### DIMENSION & PERMISSIBLE RIPPLE CURRENT

V.DC Contents $\mu$ F	4V		6.3V		10V		16V		25V		35V		50V	
	$\Phi$ D×L	mA	$\Phi$ D×L	mA	$\Phi$ D×L	mA	$\Phi$ D×L	mA	$\Phi$ D×L	mA	$\Phi$ D×L	mA	$\Phi$ D×L	mA
0.1													4X5	1.9
0.22													4X5	2.9
0.33													4X5	3.5
0.47													4X5	4.2
1											4X5	5.5	4X5	6.1
2.2									4X5	8	4X5	9.1	5X5	10
3.3							4X5	9	4X5	10	5X5	12	5X5	13
4.7					4X5	11	4X5	12	5X5	14	5X5	15	6.3X5	16
10	4X5	19	4X5	15	5X5	19	5X5	21	6.3X5	22	6.3X5	24		
22	5X5	23	5X5	26	6.3X5	31	6.3X5	33						
33	6.3X5	30	6.3X5	36	6.3X5	38								
47	6.3X5	36	6.3X5	41										