

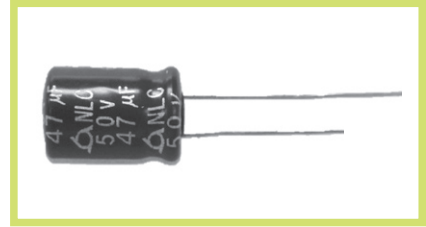
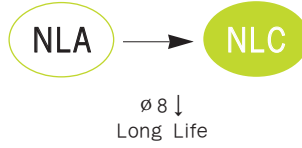
NLC Series

• 105°C 10,000Hrs assured.

- Low impedance.
- Long Life.
- For SMPS, IP-Board, Adaptor.
- RoHS compliant.
- Halogen-free capacitors are also available.

Solvent-proof

WV \leq 50V_{DC}

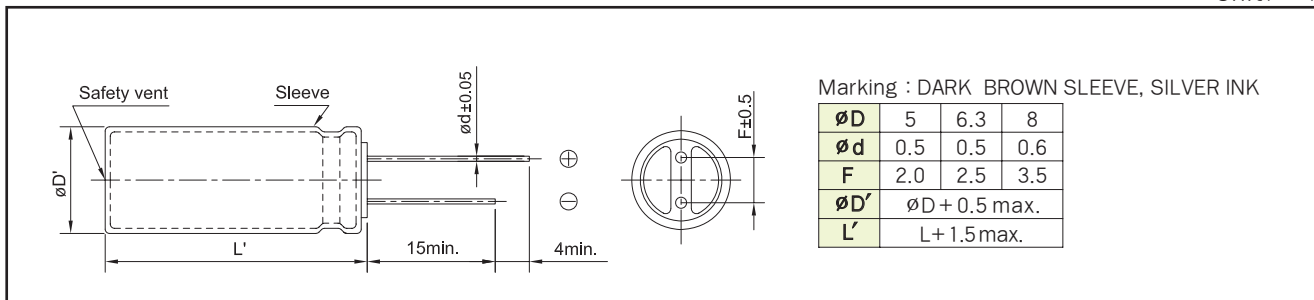


SPECIFICATIONS

Item	Characteristics																		
Rated Voltage Range	6.3 ~ 100 V _{DC}																		
Operating Temperature Range	-40 ~ +105°C																		
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)																		
Leakage Current	$I=0.01CV(\mu A)$ or $3\mu A$, whichever is greater. Where, I: Max.Leakage current(μA) C: Nominal capacitance (μF) V: Rated voltage (V _{DC}) (at 20°C, 2 minutes)																		
Dissipation Factor(Tan δ)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.17</td> <td>0.15</td> </tr> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)</p>	Rated Voltage(V _{DC})	6.3	10	16	25	35	50	63	100	Tan δ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.17	0.15
Rated Voltage(V _{DC})	6.3	10	16	25	35	50	63	100											
Tan δ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.17	0.15											
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <tr> <td>Rated voltage(V_{DC})</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25~35</td> <td>50~100</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>4</td> </tr> </table> <p>(at 120Hz)</p>	Rated voltage(V _{DC})	6.3	10	16	25~35	50~100	Z(-25°C)/Z(+20°C)	4	3	2	2	2	Z(-40°C)/Z(+20°C)	8	6	4	3	4
Rated voltage(V _{DC})	6.3	10	16	25~35	50~100														
Z(-25°C)/Z(+20°C)	4	3	2	2	2														
Z(-40°C)/Z(+20°C)	8	6	4	3	4														
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 10,000 hours at 105°C. Capacitance change $\leq \pm 25\%$ of the initial value Tan δ $\leq 200\%$ of the initial specified value Leakage current \leq 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 $\leq \pm 25\%$ of the initial value Tan δ $\leq 200\%$ of the initial specified value(where, 300% for $\geq WV63VDC$) Leakage current \leq The initial specified value																		
Others	Satisfied characteristics KS C IEC 60384-4																		

DIMENSIONS OF NLC Series

Unit(mm)



RATINGS OF NLC Series

V _{DC} ∅ D × L (mm)	6.3			10			16		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5 × 11	150	0.70	175	100	0.70	175	47	0.70	175
6.3 × 11	330	0.50	252	220	0.50	250	100	0.50	252
8 × 11.5	680	0.24	400	470	0.24	400	330	0.24	400

V _{DC} ∅ D × L (mm)	25			35			50		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5 × 11							1	4.0	32
5 × 11							2.2	3.0	43
5 × 11							3.3	2.5	84
5 × 11							4.7	2.5	100
5 × 11	47	0.70	175	33	0.70	175	10	2.0	110
6.3 × 11	100	0.50	252	47	0.60	252	22	1.6	228
6.3 × 11				56	0.50	252	33	1.6	228
8 × 11.5	220	0.24	400	150	0.24	400	47	0.80	330
8 × 15				220	0.18	520	100	0.50	400

Impedance (Z max./20°C, 100kHz)

V _{DC} ∅ D × L (mm)	63		100	
	μF	Ripple	μF	Ripple
8 × 11.5	47	270	33	240

Rated Ripple Current (mArms/105°C, 100kHz)

Nominal Capacitance(μF)

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF)	Freq.(Hz)				
	120	1k	10k	50k	100k
1 ~ 150	0.40	0.75	0.90	0.93	1.00
220 ~ 470	0.50	0.85	0.94	0.96	1.00
680	0.60	0.87	0.95	0.97	1.00