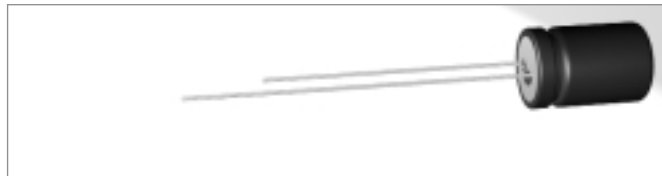


LNM Series 105 °C 7mm Non-polar

Features

- Non-polarized with 7 mm height for crossover networks of high-pitched, mean and low pitched sounds in high-fidelity sound systems
- The series offers excellent frequency characteristics and minimal capacitance deviation with frequency
- For detail specifications, please refer to Engineering Bulletin No. E119



Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40°C to +105 °C																					
Rated voltage Range	6.3 to 50 VDC																					
Capacitance Range	0.1 to 200 uF																					
Capacitance Tolerance	±20 % (120 Hz, +20 °C)																					
Leakage Current (+20 °C, max.)	1 ≤ 0.05 CV or 10 (uA) After 2 minutes whichever is greater measured with rated working voltage applied.																					
Dissipation Factor (tan δ)	<table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>D.F. (%) max</td> <td>24</td> <td>20</td> <td>16</td> <td>16</td> <td>14</td> <td>12</td> </tr> </tbody> </table> (+ 20 °C, at 120 Hz)	Working Voltage (VDC)	6.3	10	16	25	35	50	D.F. (%) max	24	20	16	16	14	12							
Working Voltage (VDC)	6.3	10	16	25	35	50																
D.F. (%) max	24	20	16	16	14	12																
Low Temperature Characteristics (120 Hz)	Impedance ratio max. <table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>6,3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z-25 °C/Z+20 °C</td> <td>4</td> <td>3</td> <td>2</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>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Working Voltage (VDC)	6,3	10	16	25	35	50	Z-25 °C/Z+20 °C	4	3	2	2	2	2	Z-40 °C/Z+20 °C	8	6	4	4	3	3
Working Voltage (VDC)	6,3	10	16	25	35	50																
Z-25 °C/Z+20 °C	4	3	2	2	2	2																
Z-40 °C/Z+20 °C	8	6	4	4	3	3																
Load Life	Test conditions Duration time: 1000 Hrs Ambient temperature: +105 °C Applied voltage: Rated DC working voltage to each polarity for 500 Hrs After test requirements: at + 20 % Capacitance change: ≤ ±20% of the initial measured value Dissipation Factor: ≤ 200 % of the initial specified value Leakage current: ≤ The initial specified value																					
Shelf Life	Test conditions Duration time: 500 Hrs Ambient temperature: + 105°C Applied voltage: None After test requirements at +20 °C: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					

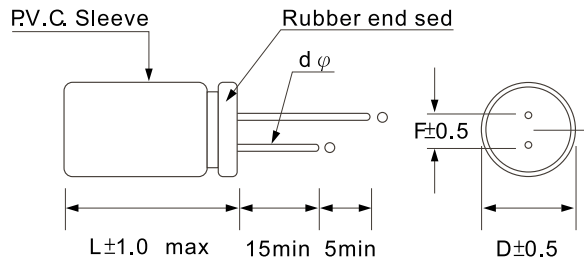
Multiplier for Ripple Current vs. Frequency

CAP(uF)\Hz		50(60)	120	400	1K	10K	50K-100K
Multiplier	CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
	10 < CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
	100 < CAP ≤ ≤ 1000	0.8	1	1.16	1.25	1.35	1.38

Multiplier for Ripple Current vs. Temperature

Temperature °C	45	60	70	85
Multier	1.8	1.5	1.3	1.0

Diagram of Dimensions: (Unit: mm)



Dφ	4	5	6.3	8
F	1.5	2.0	2.5	3.5
dφ	0.4		0.5	

Case Size

φD x L (mm)

W.V. uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1					→	4x7
0.22					→	4x7
0.33					→	4x7
0.47					→	4x7
1					→	4x7
2.2				→	4x7	4x7
3.3			→	4x7	5x7	5x7
4.7	→	→	4x7	5x7	6.3x7	6.3x7
10	4x7	4x7	5x7	6.3x7	6.3x7	8x7
22	5x7	5x7	6.3x7	6.3x7	8x7	8x7
33	5x7	6.3x7	6.3x7	8x7	8x7	-
47	6.3x7	6.3x7	6.3x7	8x7	-	-
100	8x7	8x7	8x7	-	-	-
220	8x7	-	-	-	-	-

Maximum Ripple Current

(mA, rms, 120 Hz at 105 °C)

W.V. uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1					→	1.0
0.22					→	2.0
0.33					→	3.5
0.47					→	5.0
1					→	10
2.2					→	14
3.3			→	14	16	20
4.7	→	→	18	21	22	27
10	24	24	30	35	37	44
22	30	40	51	53	58	60
33	40	55	63	70	70	-
47	56	65	75	85	-	-
100	92	105	120	-	-	-
220	135	-	-	-	-	-