

## DL Series

• 85°C 2,000Hrs assured.

- Non-solvent proof.
- For AMP, AVR.
- General Audio grade.
- RoHS compliant.
- Halogen-free capacitors are also available.

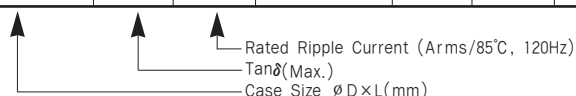


### SPECIFICATIONS

Item	Characteristics				
Rated Voltage Range	50 ~ 100 V <sub>DC</sub>				
Operating Temperature Range	-40 ~ +85°C				
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)				
Leakage Current	I=0.01CV or 2mA, whichever is smaller. Where, I: Leakage current (µA) C: Nominal capacitance (µF) V: Rated voltage (V <sub>DC</sub> ) (at 20°C, 5 minutes)				
Dissipation Factor(Tanδ)	Refer to the below table. (at 20°C, 120Hz)				
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>15</td> </tr> </table> (at 120Hz)	Z(-25°C)/Z(20°C)	4	Z(-40°C)/Z(20°C)	15
Z(-25°C)/Z(20°C)	4				
Z(-40°C)/Z(20°C)	15				
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours at 85°C. Capacitance change ≤ ±20% of the initial value. Tanδ ≤ 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 the exposing them at 85°C for 1,000 hours 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. Tanδ ≤ 200% of the initial specified value. Leakage current ≤ The initial specified value.				
Charge & Discharge	5,000 times (at 70°C) After this test is completed, the capacitors shall be satisfied the following specifications Capacitance change ≤ ±20% of the initial value. Tanδ ≤ 150% of the initial specified value. Leakage current ≤ The initial specified value. where, Charge resistance : 2.2Ω Charge conditions: rated volt. 1(A) Discharge resistance: 100Ω Charge and discharge time:30 sec(each)				
Others	Satisfied characteristics KS C IEC 60384-4				

### RATINGS OF DL Series

µF	V <sub>DC</sub>	50			63			80			100		
		Case Size	Tanδ(Max.)	Rated Ripple Current (Arms/85°C, 120Hz)	Case Size	Tanδ(Max.)	Rated Ripple Current (Arms/85°C, 120Hz)	Case Size	Tanδ(Max.)	Rated Ripple Current (Arms/85°C, 120Hz)	Case Size	Tanδ(Max.)	Rated Ripple Current (Arms/85°C, 120Hz)
3,300	25.4 × 30	0.20	1.81	25.4 × 40	0.20	1.96	25.4 × 50	0.20	1.07	30 × 60	0.20	2.32	
		0.20	1.86	30 × 30	0.25	1.75	30 × 40	0.20	1.08	35 × 50	0.20	2.32	
								35 × 35	0.25	1.86	40 × 40	0.25	2.28
4,700	25.4 × 40	0.25	2.09	25.4 × 50	0.25	2.21	25.4 × 60	0.25	2.33	35 × 60	0.25	2.62	
		0.25	2.09	30 × 40	0.25	2.22	30 × 50	0.25	2.35	40 × 50	0.25	2.61	
				35 × 30	0.30	2.03	35 × 40	0.30	2.73				
6,800	30 × 40	0.25	2.65	30 × 50	0.30	2.58	30 × 60	0.30	2.72	40 × 60	0.25	3.29	
		0.25	2.67	35 × 40	0.30	2.57	35 × 50	0.30	2.72				
		0.25	2.67					40 × 40	0.30	2.72			
8,200	30 × 50	0.35	2.63	30 × 60	0.35	2.77	35 × 60	0.30	3.16				
		0.35	2.61	35 × 50	0.35	2.77	40 × 50	0.30	3.15				
				40 × 40	0.35	2.77							
10,000	30 × 50	0.35	2.90	35 × 60	0.35	3.23	40 × 60	0.35	3.37				
		0.35	2.88	40 × 50	0.35	3.22							
12,000	30 × 60	0.35	3.32	35 × 60	0.40	3.31	50 × 50	0.40	3.50				
		0.35	3.34	40 × 50	0.40	3.30							
		0.35	3.35										
15,000	35 × 60	0.35	3.85	40 × 60	0.40	3.86							
		0.35	3.92										
22,000	40 × 60	0.35	5.00										



DIMENSIONS : Refer to page 242.