

# LXR Series

- Higher ripple capability than LXA series
- Endurance with ripple current : 5,000 hours at 105°C
- RoHS2 Compliant

LXR

Higher ripple  
↑  
LXA



## SPECIFICATIONS

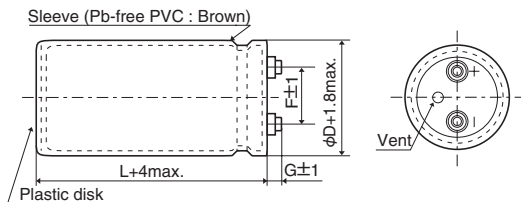
Items	Characteristics						
Category	-25 to +105°C						
Temperature Range							
Rated Voltage Range	350 to 450V <sub>dc</sub>						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)						
Dissipation Factor (tan δ)	0.15max. (at 20°C, 120Hz)						
Low Temperature Characteristics	Capacitance change $C(-25°C)/C(+20°C) \geq 0.7$ (at 120Hz)						
Insulation Resistance	When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V <sub>dc</sub> , the insulation resistance shall not be less than 100MΩ.						
Insulation Withstanding Voltage	When a voltage of 2,000V <sub>ac</sub> is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.						
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105°C. <table border="1"> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	Capacitance change	≤ ±20% of the initial value	D.F. (tan δ)	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value
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D.F. (tan δ)	≤ 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 exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. <table border="1"> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	Capacitance change	≤ ±20% of the initial value	D.F. (tan δ)	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value
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Leakage current	≤ The initial specified value						

## DIMENSIONS (Screw-Mount) [mm]

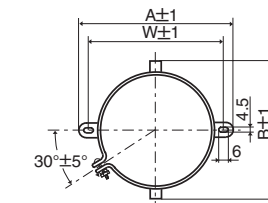
Terminal Code : LG

Mounting Clamp Code : B

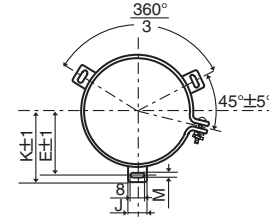
Mounting Clamp Code : C



φ63.5 & φ76.2 : G=6  
φ89 : G=4  
φ100 : G=10



φD	A	B	W	F
63.5	90	76	80	28.0
76.2	104.5	90	93.5	31.5



φD	E	K	M	F	J
63.5	38.1	43.5	4.5	28.0	14.0
76.2	44.5	50.0	4.5	31.5	14.0
89	50.8	56.5	4.5	31.5	16.0
100	56.5	63.4	5.5	41.5	18.0

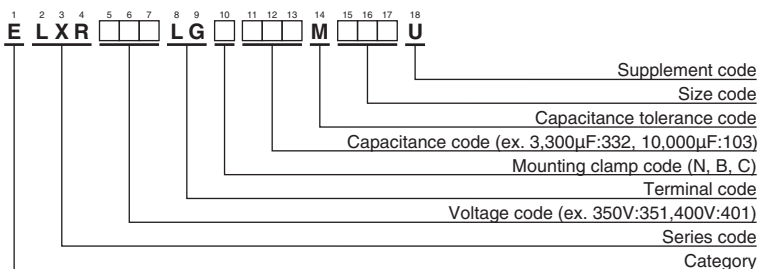
<Screw specifications>

to φ89 Plus hexagon-headed screw :M5×0.8×10  
Maximum screw tightening torque :3.23Nm

φ100 Cross-recessed head (Phillips) screw : M8×1.25×16  
Spring washer, Washer  
Maximum screw tightening torque :6.31Nm

\* The screw and the mounting clamp are separately supplied and not attached to the product.

## PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

## LXR Series

### ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 120Hz)	Part No.
350	3,300	63.5 × 115	0.15	14.4	ELXR351LGC332MDB5U	400	6,800	76.2 × 170	0.15	27.3	ELXR401LGC682MEH0U
	3,900	63.5 × 130	0.15	16.6	ELXR351LGC392MDD0U		6,800	89 × 155	0.15	26.6	ELXR401LGC682MFF5U
	4,700	63.5 × 155	0.15	19.8	ELXR351LGC472MDF5U		8,200	89 × 170	0.15	30.5	ELXR401LGC822MFH0U
	4,700	76.2 × 115	0.15	19.1	ELXR351LGC472MEB5U		10,000	100 × 190	0.15	34.5	ELXR401LGC103MGK0U
	5,600	63.5 × 170	0.15	22.5	ELXR351LGC562MDH0U		12,000	100 × 220	0.15	40.2	ELXR401LGC123MGN0U
	5,600	76.2 × 130	0.15	21.9	ELXR351LGC562MED0U		450	2,200	63.5 × 115	0.15	11.8
	6,800	76.2 × 155	0.15	26.2	ELXR351LGC682MEF5U	2,700		63.5 × 130	0.15	13.7	ELXR451LGC272MDD0U
	8,200	76.2 × 170	0.15	30.0	ELXR351LGC822MEH0U	2,700		76.2 × 115	0.15	14.5	ELXR451LGC272MEB5U
	8,200	89 × 155	0.15	29.2	ELXR351LGC822MFF5U	3,300		63.5 × 155	0.15	16.5	ELXR451LGC332MDF5U
	10,000	89 × 170	0.15	33.7	ELXR351LGC103MFH0U	3,300		76.2 × 130	0.15	16.9	ELXR451LGC332MED0U
	12,000	100 × 190	0.15	37.8	ELXR351LGC123MGK0U	3,900		63.5 × 170	0.15	18.7	ELXR451LGC392MDH0U
	15,000	100 × 250	0.15	47.7	ELXR351LGC153MGR0U	4,700		76.2 × 155	0.15	21.7	ELXR451LGC472MEF5U
400	2,700	63.5 × 115	0.15	13.1	ELXR401LGC272MDB5U	5,600		76.2 × 190	0.15	26.1	ELXR451LGC562MEK0U
	3,300	63.5 × 130	0.15	15.2	ELXR401LGC332MDD0U	5,600		89 × 155	0.15	24.1	ELXR451LGC562MFF5U
	3,900	63.5 × 155	0.15	17.9	ELXR401LGC392MDF5U	6,800		89 × 170	0.15	27.8	ELXR451LGC682MFH0U
	3,900	76.2 × 115	0.15	18.2	ELXR401LGC392MEB5U	8,200	89 × 190	0.15	32.0	ELXR451LGC822MFK0U	
	4,700	63.5 × 170	0.15	20.5	ELXR401LGC472MDH0U	10,000	100 × 220	0.15	36.8	ELXR451LGC103MGN0U	
	4,700	76.2 × 130	0.15	20.1	ELXR401LGC472MED0U	12,000	100 × 250	0.15	42.7	ELXR451LGC123MGR0U	
	5,600	76.2 × 155	0.15	23.8	ELXR401LGC562MEF5U						

### ◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Frequency (Hz)	120	300	1k	3k
Coefficient	1.0	1.1	1.3	1.4

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 to 10°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced. Also, for the LXR series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.