

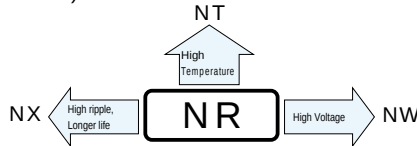
NR

Screw Terminal Type



查询"LNRI1A155MSE"供应商

- Load life of 5000 hours application of rated ripple current at 85°C .
- Extended range up to $\phi 100 \times 250L$ size.
- Available for adapted to the RoHS directive (2002/95/EC).

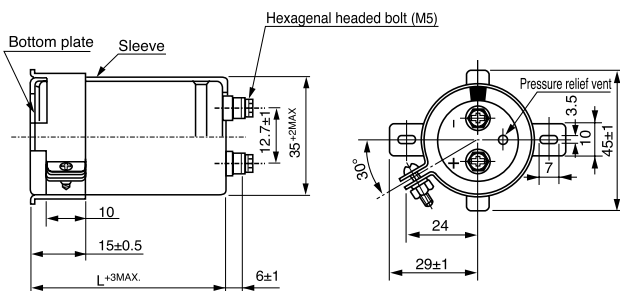


Specifications

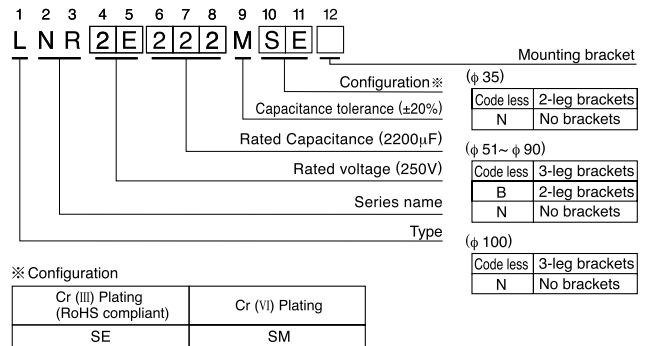
Item	Performance Characteristics											
Category Temperature Range	- 40 ~ +85°C (10~100V) , - 25 ~ +85°C (160~250V)											
Rated Voltage Range	10 ~ 250V											
Rated Capacitance Range	1000 ~ 2200000μF											
Capacitance Tolerance	± 20% at 120Hz, 20°C											
Leakage Current	After 5 minutes' application of rated voltage, leakage current is not more than $3\sqrt{CV}$ (μA) or 5 mA, whichever is smaller (at 20°C) . [C:Rated Capacitance (μF) , V:Voltage(V)]											
tan δ (MAX)	φD 35	80~100	0.6	0.4	0.35	0.3	0.25	0.25	0.2	0.12	0.15	Measurement frequency: 120Hz, Temperature : 20°C
		120	0.7	0.55	0.4	0.3	0.25	0.25	0.2	0.15	0.15	
	51	70~100	0.9	0.6	0.45	0.35	0.25	0.25	0.2	0.15	0.15	
		120~140	1.0	0.8	0.5	0.4	0.3	0.25	0.2	0.15	0.15	
	63.5	100	0.9	—	—	0.5	0.35	0.3	0.25	—	0.2	
		120~140	1.2	0.75	0.65	—	—	0.3	0.3	0.2	0.2	
	76.2	100	1.6	—	—	0.65	—	—	—	—	0.2	
		120~140	1.6	1.1	0.75	0.75	0.55	0.5	0.35	0.3	0.2	
	90	140~220	2.0	1.5	1.0	0.9	0.75	0.6	0.4	0.3	0.25	
		100	250	2.4	1.5	1.0	0.9	0.75	0.6	0.4	0.3	
Stability at Low Temperature	Measurement frequency : 120Hz											
	Rated voltage(V)			10~100				160~250				
	Impedance ratio ZT/Z20(MAX.)			Z - 40°C / Z+20°C				Z - 25°C / Z+20°C				
				12				8				
Endurance	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified rated ripple current) for 5000 hours at 85°C, capacitors meet the characteristic requirements listed at right.						Capacitance change		Within ±15% of initial value			
							tan δ		175% or less of initial specified value			
							Leakage current		Initial specified value or less			
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.						Capacitance change		Within ±20% of initial value			
							tan δ		175% or less of initial specified value			
							Leakage current		Initial specified value or less			
Marking	Printed with black color letter on light blue sleeve.											

Drawing

φ35 Screw terminal type

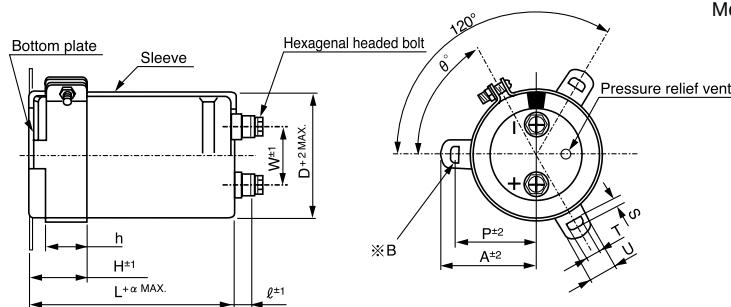


Type numbering system (Example : 250V 2200µF)



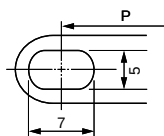
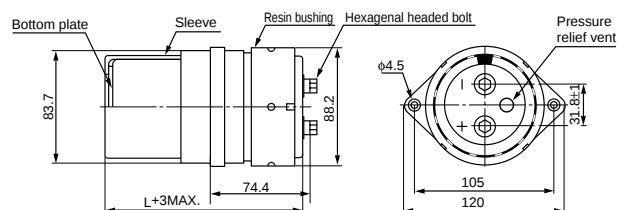
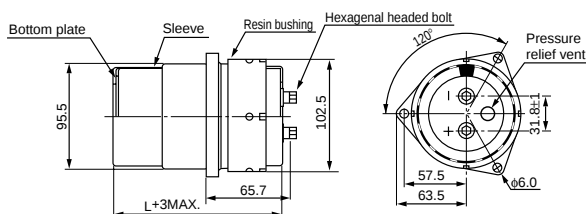
● Dimension table in next page.

NR series

[查询"LNR1A155MSE"供应商](#)Screw terminal types for $\phi 51$ and larger**Note:**

Capacitors with body dia. $\phi 51$ or larger are furnished with 3-leg brackets shown above as standard.
If these capacitors are preferred to have 2-leg brackets as shown right, add "B" in the 12th digit of type numbering system.

*B
3-leg brackets for $\phi 90$ capacitors have different hole shapes from the ordinary ones as illustrated below.

Method to mount resin bushing ($\phi 76.2$) (Apply to L=150 or more)Method to mount resin bushing ($\phi 90$) (Apply to L=150 or more)● Dimension of terminal pitch (W) and length (ℓ) and Nominal dia. of bolt (mm)

ϕD	W	ℓ	α	Nominal dia. of bolt
51	22.0	6	3	M5
63.5	28.6	6	3	M5
76.2	31.8	6	3	M5
90	31.8	6	3	M5
100	41.5	10	4	M8

● Dimensions of mounting bracket (mm)

Symbol	ϕD	3-Legs					2-Legs			
		51	63.5	76.2	90	100	51	63.5	76.2	90
P		32.5	38.1	44.5	50.8	56.3	33.2	40.5	46.5	53
A		38.5	43	49.2	58.5	62	40	46.5	53	59
T		7.5	8.0	7.0	8.0	8.0	6.0	7.0	6.0	6.0
S		5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5
U		12	14	14	18	16	14	14	14	14
θ°		60	60	60	60	60	30	30	30	30
H		20	25	30	35	36	25	35	35	35
h		15	20	24	25	30	15	20	20	20

■ Dimensions

V(Code)		10V (1A)			16V (1C)			25V (1E)		
Surge		13V			20V			32V		
Cap. (μF)	Code	Case size	$\phi D \times L$ (mm)	Rated ripple	Case size	$\phi D \times L$ (mm)	Rated ripple	Case size	$\phi D \times L$ (mm)	Rated ripple
33000	333							35×80		6.2
47000	473		35×80	6.0		35×80	6.4	35×100		8.2
68000	683		35×80	7.2		35×100	7.9	35×120		9.4
100000	104		35×100	8.8		35×120	10.6	51×100		12.0
150000	154		51×80	10.7		51×100	11.5	51×120		15.3
220000	224		51×100	13.0		51×120	15.6	63.5×120		18.9
330000	334		63.5×100	15.9		63.5×120	25.1	76.2×120		24.8
470000	474		63.5×120	19.0		76.2×120	30.5	90×170		30.8
680000	684		76.2×120	22.8		90×170	33.0	90×220		33.3
1000000	105		90×170	27.7		90×220	36.0	100×250		36.4
1500000	155		90×220	33.9		100×250	39.7			
2200000	225		100×250	41.1						

Rated Ripple (Arms) at 85°C 120Hz

NR series

[查询"LNR1A155MSE"供应商](#)

■ Dimensions

V(Code)		35V (1V)			50V (1H)			63V (1J)		
Surge		44V			63V			79V		
Cap.(μF)	Code	Case size	φ D × L (mm)	Rated ripple	Case size	φ D × L (mm)	Rated ripple	Case size	φ D × L (mm)	Rated ripple
10000	103							35×80		4.1
15000	153				35×80		5.4	35×100		5.5
22000	223				35×100		6.1	35×120		7.1
33000	333	35×80		6.2	51×70		7.0	51×80		8.8
47000	473	35×120		8.2	51×90		8.6	51×120		11.7
68000	683	51×80		9.3	51×100		11.0	63.5×100		15.0
100000	104	51×120		13.6	63.5×100		14.2	63.5×140		20.8
150000	154	63.5×100		14.5	76.2×120		18.6	76.2×140		26.0
220000	224	76.2×100		16.8	90×140		20.3	90×170		28.3
330000	334	76.2×140		24.8	90×170		25.3	90×220		31.2
470000	474	90×170		32.6	90×220		33.2	100×250		33.6
680000	684	90×220		35.2	100×250		36.0			
1000000	105	100×250		38.5						

V(Code)		80V (1K)			100V (2A)			160V (2C)		
Surge		100V			125V			200V		
Cap.(μF)	Code	Case size	φ D × L (mm)	Rated ripple	Case size	φ D × L (mm)	Rated ripple	Case size	φ D × L (mm)	Rated ripple
2200	222							35×80		3.2
3300	332							35×120		4.7
4700	472				35×80		3.8	51×80		5.0
6800	682				35×100		4.5	51×100		6.4
10000	103	35×80		4.2	35×120		5.3	63.5×100		9.1
15000	153	35×120		6.0	51×80		6.0	76.2×100		12.0
22000	223	51×80		6.5	51×100		6.8	76.2×140		16.9
33000	333	51×120		9.2	51×140		10.0	90×140		19.2
47000	473	63.5×100		12.7	63.5×140		14.4	90×170		20.6
68000	683	63.5×140		15.5	76.2×140		18.2	90×220		22.3
100000	104	76.2×140		21.3	90×170		22.1	100×250		24.4
150000	154	90×170		26.5	90×220		27.0			
220000	224	90×220		28.9	100×250		32.7			
330000	334	100×250		31.8						

V(Code)		200V (2D)			250V (2E)		
Surge		250V			300V		
Cap.(μF)	Code	Case size	φ D × L (mm)	Rated ripple	Case size	φ D × L (mm)	Rated ripple
1000	102				35×80		2.4
1500	152	35×80		2.9	35×100		3.0
2200	222	35×100		3.5	51×80		4.0
3300	332	51×80		4.8	51×100		5.4
4700	472	51×100		6.3	63.5×100		7.3
6800	682	51×140		7.3	63.5×120		8.9
10000	103	63.5×120		9.8	76.2×120		11.8
15000	153	76.2×120		13.0	90×140		16.4
22000	223	90×140		15.9	90×170		17.9
33000	333	90×170		19.5	90×220		19.7
47000	473	90×220		20.9	100×250		21.2
68000	683	100×250		22.6			

Rated Ripple (Arms) at 85°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)		60	120	360	1k	10k~
Coeff.	10~100V	0.90	1.00	1.08	1.15	1.15
	160~250V	0.88	1.00	1.08	1.15	1.20