nichicon

LNX

Screw Terminal Type, 85°C
High ripple longer life.

HR High Ripple Current
L Long Life

- Suited for use in industrial power supplies for inverter circuitry, etc.
- High ripple current, extra-high voltage application.
- High reliability, long life for 20,000 hours application of rated ripple current at +85°C.
- Extended range up to φ100 × 250L size.
- Flame retardant electroly to type available.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

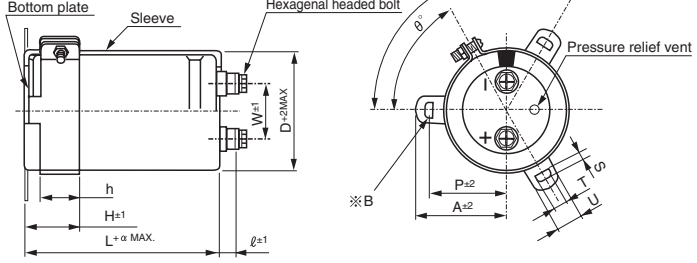
LQR
High Speed charge-discharge
LNX
Long life
LNY

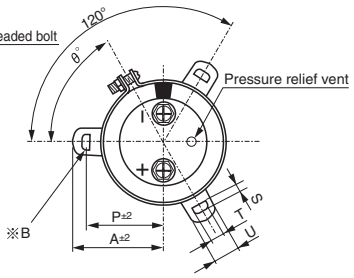
Specifications

Item	Performance Characteristics
Category Temperature Range	– 25 to +85°C
Rated Voltage Range	350 to 630V
Rated Capacitance Range	1000 to 27000μF
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)]
Tangent of loss angle (tan δ)	See refer to next page (Measurement frequency : 120Hz at 20°C)
Stability at Low Temperature	Rated voltage (V): 350 to 630; Impedance ratio ZT/Z20(MAX.): Z – 25°C / Z+20°C: 8. Measurement frequency : 120Hz
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the standard ripple current is applied for 20000 hours at 85°C, the peak voltage shall not exceed the rated voltage.(2000 hours at 85°C for the parts rated at 630V, 5000 hours at 85°C for the parts rated at 500V and 550V) The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 5000 hours at 85°C, the peak voltage shall not exceed the rated voltage. Capacitance change: Within ±20% of the initial capacitance value; tan δ: 300% or less than the initial specified value; Leakage current: Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.
Marking	Printed with white color letter on black sleeve.

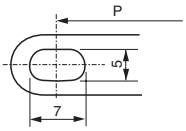
Drawing

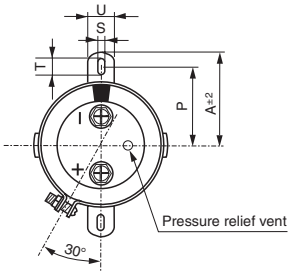
Method mount metal bracket





※ B
3-leg brackets for φ90 capacitors have different hole shapes from the ordinary ones illustrated below.





Type numbering system (Example : 450V 2200μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
L	N	X	2	W	2	2	2	M	S	E			

Mounting bracket
(φ 51 to φ 90)

Code less	3-leg brackets
BB	2-leg brackets
BN	No brackets

(φ 100)

Code less	3-leg brackets
BN	No brackets

Case dia. code

φD	Code
51	F
63.5	G
76.2	H
90	J
100	K

Configuration※
Capacitance tolerance (±20%)
Rated Capacitance (2200μF)
Rated voltage (450V)
Series name
Type

※ Configuration

Cr (III) Plating (RoHS compliant)
SE

Please refer to page 348 for schematic of dimensions.
※ Please contact to us if PVCless products are required.

● 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)

Leg shape / Symbol \ φD	3–Leg					2–Leg			
	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

● Dimension table in next page.

LNX

■Dimensions

350V (2V)						
Cap. (μF)	Size φD x L(mm)	Standard ripple (Arms) *1	Rated ripple (Arms) *2	tan δ	Leakage Current (mA)	Code
1000	51 × 60	3.5	4.6	0.2	1.77	LNX2V102MSEF
1200	51 × 70	4.2	5.3	0.2	1.94	LNX2V122MSEF
1500	51 × 80	4.9	6.3	0.2	2.17	LNX2V152MSEF
1800	51 × 90	5.6	7.3	0.2	2.38	LNX2V182MSEF
2200	51 × 110	6.7	8.8	0.2	2.63	LNX2V222MSEF
2700	51 × 130	8.0	10.3	0.2	2.91	LNX2V272MSEF
	63.5 × 90	7.7	9.9	0.2	2.91	LNX2V272MSEG
3300	51 × 150	9.2	12.1	0.2	3.22	LNX2V332MSEF
	63.5 × 100	9.0	11.8	0.2	3.22	LNX2V332MSEG
3900	63.5 × 110	10.4	12.5	0.2	3.50	LNX2V392MSEG
	76.2 × 90	10.3	12.2	0.2	3.50	LNX2V392MSEH
4700	63.5 × 130	12.0	14.8	0.2	3.84	LNX2V472MSEG
	76.2 × 100	11.9	14.0	0.2	3.84	LNX2V472MSEH
5600	63.5 × 150	14.0	17.0	0.2	4.20	LNX2V562MSEG
	76.2 × 110	13.5	16.4	0.2	4.20	LNX2V562MSEH
6800	63.5 × 170	16.3	19.6	0.2	4.62	LNX2V682MSEG
	76.2 × 130	16.0	19.1	0.2	4.62	LNX2V682MSEH
8200	76.2 × 150	18.7	22.0	0.2	5.00	LNX2V822MSEH
	90 × 130	18.2	21.4	0.2	5.00	LNX2V822MSEJ
10000	76.2 × 170	21.8	25.5	0.2	5.00	LNX2V103MSEH
	90 × 150	21.3	25.3	0.2	5.00	LNX2V103MSEJ
12000	76.2 × 190	25.1	29.1	0.2	5.00	LNX2V123MSEH
	90 × 150	24.8	28.8	0.2	5.00	LNX2V123MSEJ
15000	90 × 190	29.0	36.0	0.2	5.00	LNX2V153MSEJ
18000	90 × 220	32.4	39.7	0.2	5.00	LNX2V183MSEJ
22000	100 × 220	38.0	43.2	0.2	5.00	LNX2V223MSEK
27000	100 × 250	42.0	47.0	0.2	5.00	LNX2V273MSEK

400V (2G)						
Cap. (μF)	Size φD x L(mm)	Standard ripple (Arms) *1	Rated ripple (Arms) *2	tan δ	Leakage Current (mA)	Code
1000	51 × 70	3.8	5.0	0.2	1.89	LNX2G102MSEF
1200	51 × 80	4.5	5.8	0.2	2.07	LNX2G122MSEF
1500	51 × 100	5.3	6.8	0.2	2.32	LNX2G152MSEF
1800	51 × 110	6.0	8.2	0.2	2.54	LNX2G182MSEF
2200	51 × 130	7.0	9.3	0.2	2.81	LNX2G222MSEF
	63.5 × 90	6.8	8.9	0.2	2.81	LNX2G222MSEG
2700	63.5 × 110	8.2	10.8	0.2	3.11	LNX2G272MSEG
	76.2 × 90	8.1	10.6	0.2	3.11	LNX2G272MSEH
3300	63.5 × 130	9.6	12.9	0.2	3.44	LNX2G332MSEG
	76.2 × 100	9.3	12.4	0.2	3.44	LNX2G332MSEH
3900	63.5 × 150	11.0	14.4	0.2	3.74	LNX2G392MSEG
	76.2 × 100	10.5	13.9	0.2	3.74	LNX2G392MSEH
4700	63.5 × 170	12.6	16.6	0.2	4.11	LNX2G472MSEG
	76.2 × 130	12.3	16.0	0.2	4.11	LNX2G472MSEH
5600	63.5 × 190	14.7	18.8	0.2	4.49	LNX2G562MSEG
	76.2 × 150	14.3	18.3	0.2	4.49	LNX2G562MSEH
6800	76.2 × 170	16.7	21.2	0.2	4.94	LNX2G682MSEH
	90 × 130	16.3	20.7	0.2	4.94	LNX2G682MSEJ
8200	76.2 × 190	19.3	24.1	0.2	5.00	LNX2G822MSEH
	90 × 150	19.0	23.7	0.2	5.00	LNX2G822MSEJ
10000	76.2 × 220	22.7	28.3	0.2	5.00	LNX2G103MSEH
	90 × 170	22.2	28.0	0.2	5.00	LNX2G103MSEJ
12000	90 × 190	25.5	31.9	0.2	5.00	LNX2G123MSEJ
15000	100 × 190	29.6	37.0	0.2	5.00	LNX2G153MSEK
18000	100 × 220	33.0	40.5	0.2	5.00	LNX2G183MSEK
22000	100 × 250	41.4	44.7	0.2	5.00	LNX2G223MSEK

450V (2W)						
Cap. (μF)	Size φD x L(mm)	Standard ripple (Arms) *1	Rated ripple (Arms) *2	tan δ	Leakage Current (mA)	Code
1000	51 × 80	4.0	5.2	0.2	2.01	LNX2W102MSEF
1200	51 × 100	4.7	6.3	0.2	2.20	LNX2W122MSEF
1500	51 × 110	5.4	7.3	0.2	2.46	LNX2W152MSEF
1800	51 × 130	6.4	8.7	0.2	2.70	LNX2W182MSEF
	63.5 × 90	6.1	7.6	0.2	2.70	LNX2W182MSEG
2200	63.5 × 110	7.2	9.6	0.2	2.98	LNX2W222MSEG
	76.2 × 90	7.1	9.4	0.2	2.98	LNX2W222MSEH
2700	63.5 × 130	8.6	11.3	0.2	3.30	LNX2W272MSEG
	76.2 × 100	8.3	11.0	0.2	3.30	LNX2W272MSEH
3300	63.5 × 150	10.0	13.3	0.2	3.65	LNX2W332MSEG
	76.2 × 110	9.7	12.9	0.2	3.65	LNX2W332MSEH
3900	63.5 × 170	11.4	15.1	0.2	3.97	LNX2W392MSEG
	76.2 × 130	11.2	14.6	0.2	3.97	LNX2W392MSEH
4700	63.5 × 190	13.0	17.3	0.2	4.36	LNX2W472MSEG
	76.2 × 150	12.9	16.9	0.2	4.36	LNX2W472MSEH
5600	76.2 × 170	15.4	19.4	0.2	4.76	LNX2W562MSEH
	90 × 150	15.3	19.1	0.2	4.76	LNX2W562MSEJ
6800	76.2 × 190	17.3	22.0	0.2	5.00	LNX2W682MSEH
	90 × 150	17.1	21.6	0.2	5.00	LNX2W682MSEJ
8200	76.2 × 220	20.3	25.7	0.2	5.00	LNX2W822MSEH
	90 × 170	19.8	25.4	0.2	5.00	LNX2W822MSEJ
10000	90 × 190	23.0	29.6	0.2	5.00	LNX2W103MSEJ
12000	90 × 220	26.9	33.5	0.2	5.00	LNX2W123MSEJ
15000	100 × 220	31.1	38.0	0.2	5.00	LNX2W153MSEK
18000	100 × 250	37.0	41.3	0.2	5.00	LNX2W183MSEK

500V (2H)						
Cap. (μF)	Size φD x L(mm)	Standard ripple (Arms) *1	Rated ripple (Arms) *2	tan δ	Leakage Current (mA)	Code
1000	51 × 110	4.2	–	0.2	2.12	LNX2H102MSEF
1200	63.5 × 90	4.8	–	0.2	2.32	LNX2H122MSEG
1500	63.5 × 90	5.5	–	0.2	2.59	LNX2H152MSEG
1800	63.5 × 110	6.5	–	0.2	2.84	LNX2H182MSEG
2200	63.5 × 130	7.7	–	0.2	3.14	LNX2H222MSEG
2700	76.2 × 110	8.8	–	0.2	3.48	LNX2H272MSEH
3300	76.2 × 130	10.4	–	0.2	3.85	LNX2H332MSEH
3900	76.2 × 150	12.1	–	0.2	4.18	LNX2H392MSEH
4700	90 × 130	13.7	–	0.2	4.59	LNX2H472MSEJ
5600	90 × 150	15.9	–	0.2	5.00	LNX2H562MSEJ
6800	90 × 170	18.5	–	0.2	5.00	LNX2H682MSEJ
8200	90 × 190	21.4	–	0.2	5.00	LNX2H822MSEJ
10000	100 × 190	23.8	–	0.2	5.00	LNX2H103MSEK
12000	100 × 220	27.8	–	0.2	5.00	LNX2H123MSEK

Ripple current (Arms) at 85°C 120Hz

LNX

■Dimensions

550V (2L)						
Cap. (μF)	Size φD × L(mm)	Standard ripple (Arms) ※1	Rated ripple (Arms) ※2	tan δ	Leakage Current (mA)	Code
1000	51 × 130	4.3	–	0.2	2.22	LNX2L102MSEF
1200	63.5 × 110	5.0	–	0.2	2.43	LNX2L122MSEG
1500	63.5 × 130	6.0	–	0.2	2.72	LNX2L152MSEG
1800	76.2 × 110	6.7	–	0.2	2.98	LNX2L182MSEH
2200	76.2 × 130	8.0	–	0.2	3.30	LNX2L222MSEH
2700	76.2 × 150	9.4	–	0.2	3.65	LNX2L272MSEH
3300	76.2 × 170	11.0	–	0.2	4.04	LNX2L332MSEH
3900	90 × 150	12.5	–	0.2	4.39	LNX2L392MSEJ
4700	90 × 170	14.5	–	0.2	4.82	LNX2L472MSEJ
5600	90 × 190	16.6	–	0.2	5.00	LNX2L562MSEJ
6800	90 × 220	19.5	–	0.2	5.00	LNX2L682MSEJ
8200	100 × 220	21.6	–	0.2	5.00	LNX2L822MSEK
10000	100 × 250	25.2	–	0.2	5.00	LNX2L103MSEK

630V(2J)						
Cap. (μF)	Size φD × L(mm)	Standard ripple (Arms) ※1	Rated ripple (Arms) ※2	tan δ	Leakage Current (mA)	Code
1000	63.5 × 130	5.9	–	0.3	2.38	LNX2J102MSEG
1200	76.2 × 110	6.7	–	0.3	2.60	LNX2J122MSEH
1500	76.2 × 130	8.1	–	0.3	2.91	LNX2J152MSEH
1800	76.2 × 150	9.6	–	0.3	3.19	LNX2J182MSEH
2200	90 × 130	10.7	–	0.3	3.53	LNX2J222MSEJ
2700	90 × 150	12.6	–	0.3	3.91	LNX2J272MSEJ
3300	90 × 170	14.7	–	0.3	4.32	LNX2J332MSEJ
3900	90 × 190	17.3	–	0.3	4.70	LNX2J392MSEJ
4700	100 × 220	21.4	–	0.3	5.00	LNX2J472MSEK
5600	100 × 250	24.7	–	0.3	5.00	LNX2J562MSEK

Ripple current (Arms) at 85°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	360	1k	10k or more
Coefficient	0.80	0.82	1.00	1.20	1.35	1.40

(※ 1) • Standard ripple current:
Ripple current value allowable for the life time of 20,000 hours at 85°C.
(5,000 hours at 85°C for the voltage rating of 500V and 550V. 2,000 hours at 85°C for the voltage rating of 630V)

(※ 2) • Maximum rated ripple current:
Ripple current value allowable for the life time of 5,000 hours at 85°C.

• 3-leg bracket is furnished as standard.
In case no-bracket or 2-leg bracket required, please put BN or BB at the and of type number.

Ex. 3-leg bracket LNX2G472MSEH
2-leg bracket LNX2G472MSEHBB
No bracket LNX2G472MSEHBN

• Flame-retardant type electrolyte is also available.
Please contact to Nichicon representative for the rated ripple current value.

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

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Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

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