ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

NK

Screw Terminal Type, 85°C Smaller-sized series

Smaller

HR High Ripple Current

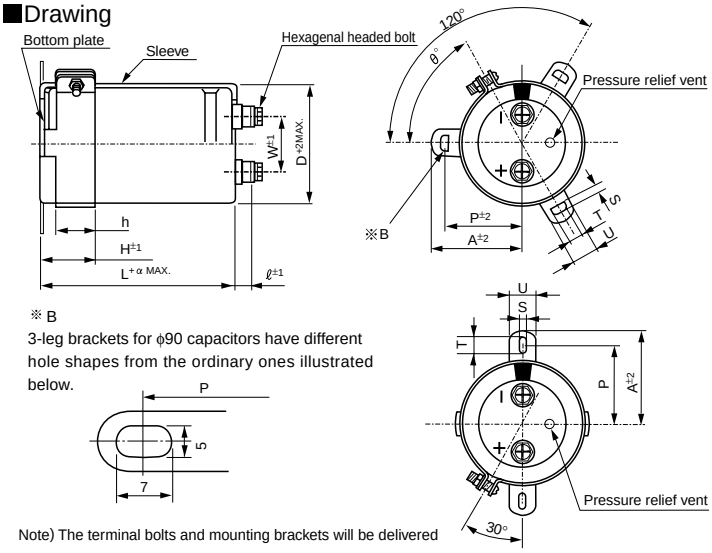
- Load life 5000 hours application of ripple current at 85°C.
- Compliant to the RoHS directive (2002/95/EC).

NX
Smaller
NK

Specifications

Item	Performance Characteristics
Category Temperature Range	– 25 to +85°C
Rated Voltage Range	350 to 500V
Rated Capacitance Range	1000 to 18000μF
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)	0.20MAX. (120Hz, 20°C)
Stability at Low Temperature	Rated voltage (V): 350 to 500 Impedance ratio ZT/Z20(MAX.): Z – 25°C / Z+20°C: 8 Measurement frequency : 120Hz
Insulation Resistance	The insulation resistance shall be more than 100MΩ at DC 500V application between terminal and bracket.
Voltage proof	There is no abnormality during AC 2500V 1 minute's application between terminal and bracket.
Endurance	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 value for endurance characteristics listed at right. 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
Marking	Printed with white color letter on black sleeve.

Drawing



※B

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

Note) The terminal bolts and mounting brackets will be delivered

Type numbering system (Example : 400V 10000μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
L	N	K	2	G	1	0	3	M	S	E	J		

Mounting bracket (ϕ51 to ϕ90)

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

Case dia. code

ϕD	Code
51	F
63.5	G
76.2	H
90	J

Configuration※
Capacitance tolerance (±20%)
Rated capacitance (10000μF)
Rated voltage (400V)
Series name
Type

※Configuration

Cr(Ⅲ) Plating (RoHS compliant)
SE

Please refer to page 293 for schematic of dimensions.
※Please contact to us if PVCless products are required.

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

● 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	M 5
63.5	28.6	6	3	M 5
76.2	31.8	6	3	M 5
90	31.8	6	3	M 5

● 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

● Dimensions of mounting bracket (mm)

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

● Dimension table in next page.

NK series

■Dimensions

350V (2V)					
Cap. (μF)	Size φD × L(mm)	Rated ripple (Arms)	tan δ	Leakage Current (mA)	Code
1000	51 × 60	4.8	0.20	1.77	LNK2V102MSEF
1200	51 × 70	5.5	0.20	1.94	LNK2V122MSEF
1500	51 × 75	6.5	0.20	2.17	LNK2V152MSEF
1800	51 × 90	7.3	0.20	2.38	LNK2V182MSEF
2200	51 × 95	8.2	0.20	2.63	LNK2V222MSEF
2700	51 × 105	9.3	0.20	2.91	LNK2V272MSEF
	63.5 × 85	9.9	0.20	2.91	LNK2V272MSEG
3300	63.5 × 95	11.8	0.20	3.22	LNK2V332MSEG
3900	63.5 × 100	12.8	0.20	3.50	LNK2V392MSEG
	76.2 × 85	13.0	0.20	3.50	LNK2V392MSEH
4700	63.5 × 115	13.8	0.20	3.84	LNK2V472MSEG
	76.2 × 90	14.2	0.20	3.84	LNK2V472MSEH
5600	63.5 × 130	17.3	0.20	4.20	LNK2V562MSEG
	76.2 × 100	16.8	0.20	4.20	LNK2V562MSEH
6800	63.5 × 155	19.6	0.20	4.62	LNK2V682MSEG
	76.2 × 115	19.0	0.20	4.62	LNK2V682MSEH
8200	63.5 × 190	22.6	0.20	5.00	LNK2V822MSEG
	76.2 × 130	21.0	0.20	5.00	LNK2V822MSEH
	90 × 120	24.0	0.20	5.00	LNK2V822MSEJ
10000	76.2 × 155	25.1	0.20	5.00	LNK2V103MSEH
	90 × 140	25.9	0.20	5.00	LNK2V103MSEJ
12000	90 × 150	28.4	0.20	5.00	LNK2V123MSEJ

400V (2G)					
Cap. (μF)	Size φD × L(mm)	Rated ripple (Arms)	tan δ	Leakage Current (mA)	Code
1000	51 × 65	5.0	0.20	1.89	LNK2G102MSEF
1200	51 × 75	5.8	0.20	2.07	LNK2G122MSEF
1500	51 × 90	6.8	0.20	2.32	LNK2G152MSEF
1800	51 × 95	7.3	0.20	2.54	LNK2G182MSEF
2200	51 × 105	8.8	0.20	2.81	LNK2G222MSEF
	63.5 × 85	8.9	0.20	2.81	LNK2G222MSEG
2700	51 × 115	10.2	0.20	3.11	LNK2G272MSEF
	63.5 × 90	10.8	0.20	3.11	LNK2G272MSEG
	76.2 × 75	10.6	0.20	3.11	LNK2G272MSEH
3300	63.5 × 95	11.8	0.20	3.44	LNK2G332MSEG
	76.2 × 90	12.0	0.20	3.44	LNK2G332MSEH
3900	63.5 × 115	12.8	0.20	3.74	LNK2G392MSEG
	76.2 × 95	13.0	0.20	3.74	LNK2G392MSEH
4700	63.5 × 130	14.8	0.20	4.11	LNK2G472MSEG
	76.2 × 110	15.0	0.20	4.11	LNK2G472MSEH
5600	63.5 × 155	17.0	0.20	4.49	LNK2G562MSEG
	76.2 × 115	16.5	0.20	4.49	LNK2G562MSEH
6800	63.5 × 190	20.6	0.20	4.94	LNK2G682MSEG
	76.2 × 130	19.2	0.20	4.94	LNK2G682MSEH
	90 × 120	20.7	0.20	4.94	LNK2G682MSEJ
8200	76.2 × 155	22.7	0.20	5.00	LNK2G822MSEH
	90 × 120	22.9	0.20	5.00	LNK2G822MSEJ
10000	76.2 × 170	26.2	0.20	5.00	LNK2G103MSEH
	90 × 130	24.2	0.20	5.00	LNK2G103MSEJ
12000	90 × 155	28.5	0.20	5.00	LNK2G123MSEJ
15000	90 × 190	34.8	0.20	5.00	LNK2G153MSEJ
18000	90 × 235	41.2	0.20	5.00	LNK2G183MSEJ

450V (2W)					
Cap. (μF)	Size φD × L(mm)	Rated ripple (Arms)	tan δ	Leakage Current (mA)	Code
1000	51 × 75	5.2	0.20	2.01	LNK2W102MSEF
1200	51 × 85	6.3	0.20	2.20	LNK2W122MSEF
1500	51 × 95	6.4	0.20	2.46	LNK2W152MSEF
1800	51 × 105	7.6	0.20	2.70	LNK2W182MSEF
	63.5 × 85	7.6	0.20	2.70	LNK2W182MSEG
2200	63.5 × 90	9.0	0.20	2.98	LNK2W222MSEG
	76.2 × 85	9.4	0.20	2.98	LNK2W222MSEH
2700	63.5 × 95	10.5	0.20	3.30	LNK2W272MSEG
	76.2 × 90	11.0	0.20	3.30	LNK2W272MSEH
3300	63.5 × 115	12.1	0.20	3.65	LNK2W332MSEG
	76.2 × 100	12.9	0.20	3.65	LNK2W332MSEH
3900	76.2 × 110	14.2	0.20	3.97	LNK2W392MSEH
4700	63.5 × 155	15.6	0.20	4.36	LNK2W472MSEG
	76.2 × 115	15.1	0.20	4.36	LNK2W472MSEH
5600	63.5 × 190	18.7	0.20	4.76	LNK2W562MSEG
	90 × 120	18.6	0.20	4.76	LNK2W562MSEJ
6800	76.2 × 155	20.7	0.20	5.00	LNK2W682MSEH
	90 × 125	20.0	0.20	5.00	LNK2W682MSEJ
8200	76.2 × 190	19.1	0.20	5.00	LNK2W822MSEH
12000	90 × 190	29.7	0.20	5.00	LNK2W123MSEJ
15000	90 × 235	35.9	0.20	5.00	LNK2W153MSEJ

500V (2H)					
Cap. (μF)	Size φD × L(mm)	Rated ripple (Arms)	tan δ	Leakage Current (mA)	Code
1000	51 × 100	4.2	0.20	2.12	LNK2H102MSEF
	63.5 × 80	4.2	0.20	2.12	LNK2H102MSEG
1200	51 × 115	6.2	0.20	2.32	LNK2H122MSEF
	63.5 × 85	6.3	0.20	2.32	LNK2H122MSEG
1500	51 × 130	7.3	0.20	2.59	LNK2H152MSEF
	63.5 × 90	7.1	0.20	2.59	LNK2H152MSEG
1800	63.5 × 105	8.3	0.20	2.84	LNK2H182MSEG
2200	63.5 × 120	9.6	0.20	3.14	LNK2H222MSEG
2700	76.2 × 110	10.7	0.20	3.48	LNK2H272MSEH
3300	76.2 × 115	12.4	0.20	3.85	LNK2H332MSEH
3900	76.2 × 150	14.4	0.20	4.18	LNK2H392MSEH
	90 × 120	14.4	0.20	4.18	LNK2H392MSEJ
4700	76.2 × 170	16.5	0.20	4.59	LNK2H472MSEH
	90 × 130	15.8	0.20	4.59	LNK2H472MSEJ
5600	76.2 × 190	19.0	0.20	5.00	LNK2H562MSEH
	90 × 150	18.6	0.20	5.00	LNK2H562MSEJ
6800	90 × 170	21.2	0.20	5.00	LNK2H682MSEJ
8200	90 × 190	24.5	0.20	5.00	LNK2H822MSEJ
10000	90 × 235	29.3	0.20	5.00	LNK2H103MSEJ

Rated ripple current (Arms) at 85°C 120Hz