

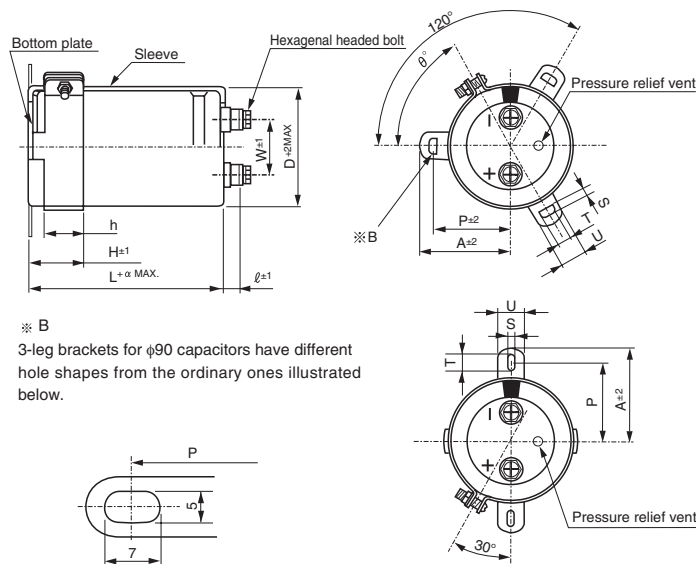
**LNU**Screw Terminal Type, 105°C  
High Voltage, Smaller Sized.**LNU**High Voltage  
Smaller  
**LNT**

- Suited for use in industrial power supplies for inverter circuitry, etc.
- Rated voltage range up to DC525V.
- Load life of 5000 hours application of ripple current at 105°C.
- High voltage / Smaller sized than LNT.
- Coped with loading of high speed charge-discharge.
- Suited for high frequency regenerative voltage for AC servomotor, general inverter.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).

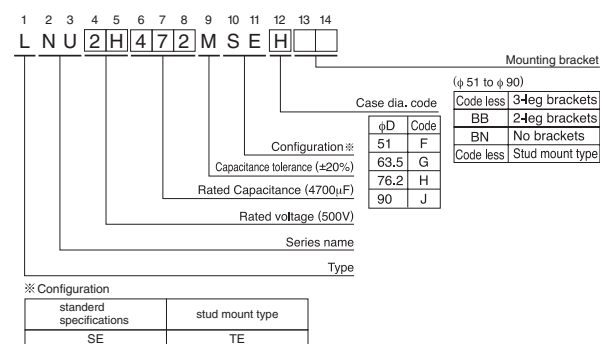
## Specifications

| Item                                     | Performance Characteristics                                                                                                                                                                                                 |                    |                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------|
| Category Temperature Range               | - 40 to +105°C                                                                                                                                                                                                              |                    |                                                   |
| Rated Voltage Range                      | 400 to 525V                                                                                                                                                                                                                 |                    |                                                   |
| Rated Capacitance Range                  | 680 to 18000μF                                                                                                                                                                                                              |                    |                                                   |
| Capacitance Tolerance                    | ± 20% (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)<br>[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)                                                                                                                                                                                                            |                    | Measurement frequency : 120Hz                     |
|                                          | 400 to 525                                                                                                                                                                                                                  |                    |                                                   |
|                                          | Z - 40°C / Z+20°C                                                                                                                                                                                                           |                    |                                                   |
|                                          | Impedance ratio ZT/Z20(MAX.)                                                                                                                                                                                                | 8                  |                                                   |
| 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 105°C, the peak voltage shall not exceed the rated voltage. | Capacitance change | Within ±20% of the initial capacitance value      |
|                                          |                                                                                                                                                                                                                             | tan δ              | 200% 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 105°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 requirements listed at right.                        | Capacitance change | Within ±20% of the initial capacitance value      |
|                                          |                                                                                                                                                                                                                             | tan δ              | 200% or less than the initial specified value     |
|                                          |                                                                                                                                                                                                                             | Leakage current    | Less than or equal to the initial specified value |
| Endurance of charge - discharge behavior | After an application of charge-discharge voltage for 50million times (charge-discharge voltage difference(ΔV) = rated voltage × 0.3, cycle 3Hz) capacitors shall meet the characteristics requirement listed at right.      | Capacitance change | Within ±20% of the initial capacitance value      |
|                                          |                                                                                                                                                                                                                             | tan δ              | 200% 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



## Type numbering system (Example : 500V 4700μF)



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

Note) The brackets will be supplied in the separate box.

## 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                   |

About product of stud bolt

- Nylon nut and nylon washer attachment become the standard specifications. (cf. P.348)
- It is not attached to the bracket.
- Field 13 and 14 become blank in Type number system.

## Dimensions of mounting bracket (mm)

| Leg shape | 3-Leg |      |      |      | 2-Leg |      |      |     |
|-----------|-------|------|------|------|-------|------|------|-----|
| Symbol    | 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.

CAT.8100I

LNU

## ■ Dimensions

| 400V (2G)    |                    |                        |       |                         |              |
|--------------|--------------------|------------------------|-------|-------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(Arms) | tan δ | Leakage Current<br>(mA) | Code         |
| 2700         | 63.5 × 80          | 11.9                   | 0.20  | 3.12                    | LNU2G272MSEG |
| 3300         | 63.5 × 95          | 13.6                   | 0.20  | 3.45                    | LNU2G332MSEG |
|              | 76.2 × 75          | 13.1                   | 0.20  | 3.45                    | LNU2G332MSEH |
| 3900         | 63.5 × 100         | 14.6                   | 0.20  | 3.75                    | LNU2G392MSEG |
|              | 76.2 × 85          | 14.3                   | 0.20  | 3.75                    | LNU2G392MSEH |
| 4700         | 63.5 × 120         | 16.1                   | 0.20  | 4.11                    | LNU2G472MSEG |
|              | 76.2 × 95          | 15.8                   | 0.20  | 4.11                    | LNU2G472MSEH |
| 5600         | 63.5 × 135         | 17.7                   | 0.20  | 4.49                    | LNU2G562MSEG |
|              | 76.2 × 105         | 17.1                   | 0.20  | 4.49                    | LNU2G562MSEH |
| 6800         | 76.2 × 125         | 19.5                   | 0.20  | 4.95                    | LNU2G682MSEH |
|              | 90 × 105           | 18.8                   | 0.20  | 4.95                    | LNU2G682MSEJ |
| 8200         | 76.2 × 170         | 24.2                   | 0.20  | 5.00                    | LNU2G822MSEH |
|              | 90 × 125           | 23.1                   | 0.20  | 5.00                    | LNU2G822MSEJ |
| 10000        | 90 × 145           | 25.9                   | 0.20  | 5.00                    | LNU2G103MSEJ |
| 12000        | 90 × 165           | 30.1                   | 0.20  | 5.00                    | LNU2G123MSEJ |
| 15000        | 90 × 195           | 33.5                   | 0.20  | 5.00                    | LNU2G153MSEJ |
| 18000        | 90 × 235           | 38.0                   | 0.20  | 5.00                    | LNU2G183MSEJ |

| 450V (2W)    |                    |                        |       |                         |              |
|--------------|--------------------|------------------------|-------|-------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(Arms) | tan δ | Leakage Current<br>(mA) | Code         |
| 2700         | 63.5 × 100         | 13.1                   | 0.20  | 3.31                    | LNU2W272MSEG |
| 3300         | 63.5 × 120         | 15.0                   | 0.20  | 3.66                    | LNU2W332MSEG |
|              | 76.2 × 95          | 14.4                   | 0.20  | 3.66                    | LNU2W332MSEH |
| 3900         | 63.5 × 135         | 16.3                   | 0.20  | 3.97                    | LNU2W392MSEG |
|              | 76.2 × 105         | 15.4                   | 0.20  | 3.97                    | LNU2W392MSEH |
| 4700         | 63.5 × 165         | 18.5                   | 0.20  | 4.36                    | LNU2W472MSEG |
|              | 76.2 × 130         | 17.9                   | 0.20  | 4.36                    | LNU2W472MSEH |
| 5600         | 76.2 × 150         | 20.5                   | 0.20  | 4.76                    | LNU2W562MSEH |
|              | 90 × 105           | 19.6                   | 0.20  | 4.76                    | LNU2W562MSEJ |
| 6800         | 76.2 × 170         | 23.4                   | 0.20  | 5.00                    | LNU2W682MSEH |
|              | 90 × 125           | 22.5                   | 0.20  | 5.00                    | LNU2W682MSEJ |
| 8200         | 76.2 × 195         | 25.7                   | 0.20  | 5.00                    | LNU2W822MSEH |
|              | 90 × 145           | 24.7                   | 0.20  | 5.00                    | LNU2W822MSEJ |
| 10000        | 90 × 165           | 27.3                   | 0.20  | 5.00                    | LNU2W103MSEJ |
| 12000        | 90 × 195           | 29.9                   | 0.20  | 5.00                    | LNU2W123MSEJ |
| 15000        | 90 × 235           | 34.5                   | 0.20  | 5.00                    | LNU2W153MSEJ |

| 500V (2H)    |                    |                        |       |                         |              |
|--------------|--------------------|------------------------|-------|-------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(Arms) | tan δ | Leakage Current<br>(mA) | Code         |
| 680          | 51 × 75            | 4.0                    | 0.20  | 1.75                    | LNU2H681MSEF |
| 1000         | 51 × 90            | 5.0                    | 0.20  | 2.12                    | LNU2H102MSEF |
| 1200         | 51 × 115           | 5.7                    | 0.20  | 2.32                    | LNU2H122MSEF |
|              | 63.5 × 80          | 5.7                    | 0.20  | 2.32                    | LNU2H122MSEG |
| 1500         | 51 × 135           | 6.6                    | 0.20  | 2.60                    | LNU2H152MSEF |
|              | 63.5 × 90          | 6.6                    | 0.20  | 2.60                    | LNU2H152MSEG |
| 1800         | 63.5 × 100         | 7.4                    | 0.20  | 2.85                    | LNU2H182MSEG |
|              | 76.2 × 70          | 7.4                    | 0.20  | 2.85                    | LNU2H182MSEH |
| 2200         | 63.5 × 120         | 8.5                    | 0.20  | 3.15                    | LNU2H222MSEG |
|              | 76.2 × 95          | 8.5                    | 0.20  | 3.15                    | LNU2H222MSEH |
| 2700         | 63.5 × 135         | 9.6                    | 0.20  | 3.49                    | LNU2H272MSEG |
|              | 76.2 × 105         | 9.6                    | 0.20  | 3.49                    | LNU2H272MSEH |
| 3300         | 63.5 × 165         | 10.9                   | 0.20  | 3.85                    | LNU2H332MSEG |
|              | 76.2 × 130         | 10.9                   | 0.20  | 3.85                    | LNU2H332MSEH |
| 3900         | 76.2 × 145         | 12.4                   | 0.20  | 4.19                    | LNU2H392MSEH |
|              | 90 × 105           | 12.4                   | 0.20  | 4.19                    | LNU2H392MSEJ |
| 4700         | 76.2 × 165         | 13.9                   | 0.20  | 4.60                    | LNU2H472MSEH |
|              | 90 × 125           | 13.9                   | 0.20  | 4.60                    | LNU2H472MSEJ |
| 5600         | 90 × 145           | 15.8                   | 0.20  | 5.00                    | LNU2H562MSEJ |
| 6800         | 90 × 165           | 18.5                   | 0.20  | 5.00                    | LNU2H682MSEJ |
| 8200         | 90 × 205           | 20.2                   | 0.20  | 5.00                    | LNU2H822MSEJ |

| 525V (N7)    |                    |                        |       |                         |              |
|--------------|--------------------|------------------------|-------|-------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(Arms) | tan δ | Leakage Current<br>(mA) | Code         |
| 680          | 51 × 85            | 4.4                    | 0.20  | 1.75                    | LNUN7681MSEF |
| 1000         | 51 × 95            | 5.4                    | 0.20  | 2.12                    | LNUN7102MSEF |
| 1500         | 63.5 × 95          | 7.2                    | 0.20  | 2.60                    | LNUN7152MSEG |
| 1800         | 63.5 × 105         | 8.0                    | 0.20  | 2.85                    | LNUN7182MSEG |
| 2200         | 63.5 × 135         | 9.2                    | 0.20  | 3.15                    | LNUN7222MSEG |
|              | 76.2 × 100         | 9.2                    | 0.20  | 3.15                    | LNUN7222MSEH |
| 2700         | 76.2 × 115         | 10.6                   | 0.20  | 3.49                    | LNUN7272MSEH |
| 3300         | 76.2 × 140         | 12.1                   | 0.20  | 3.85                    | LNUN7332MSEH |
| 4700         | 76.2 × 185         | 15.2                   | 0.20  | 4.60                    | LNUN7472MSEH |
|              | 90 × 135           | 15.2                   | 0.20  | 4.60                    | LNUN7472MSEJ |
| 5600         | 90 × 155           | 17.5                   | 0.20  | 5.00                    | LNUN7562MSEJ |

Rated ripple current (Arms) at 105°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 | 1.30 | 1.40        |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.