

# LS series

- Load life:85°C 5000 hours Screw terminal type.
- Suitable for use in industrial equipment industrial power,solar pv inverter, wind power, Marine, heavy trucks, and other fields
- 85°C 5000小時 螺絲型端子。
- 適用於工業設備工控電源，太陽能光伏逆變器，風力發電，船舶，重型卡車等領域。



## SPECIFICATIONS

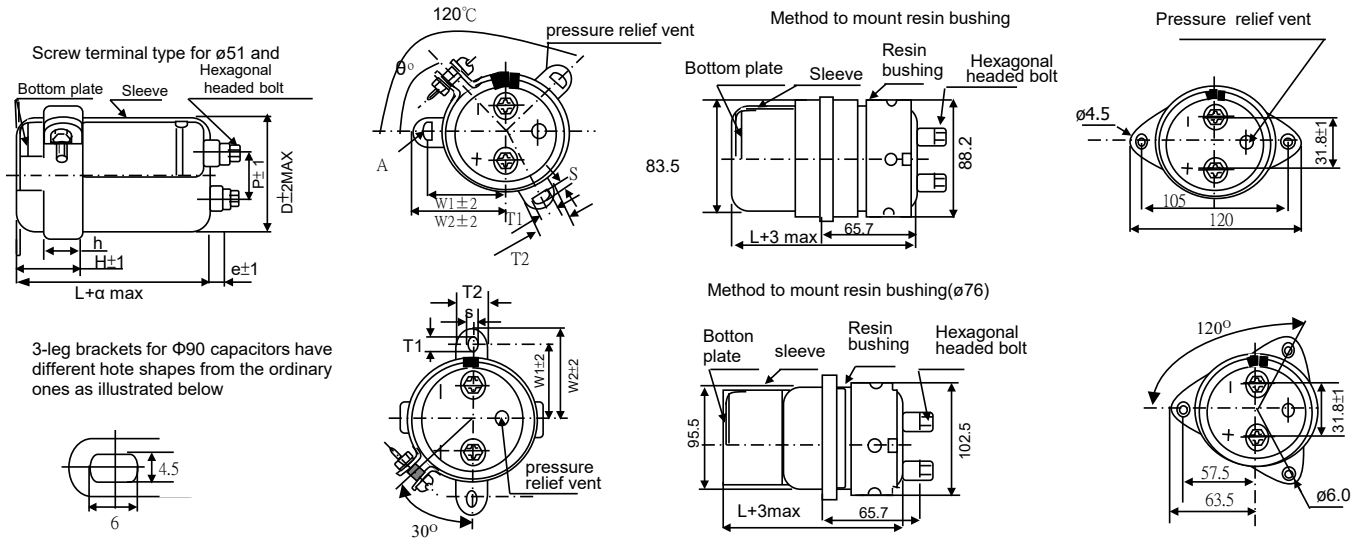
| Items 項目                                    | Characteristics 特性   |   |      |      |      |
|---|--|---|------|------|------|
| Capacitance Tolerance<br>靜電容量誤差             | ± 20%(120Hz,20°C)  |   |      |      |      |
| Operating Temperature Range<br>適用溫度範圍       | - 25 ~ +85°C   |   |      |      |      |
| Rated Voltage Range<br>額定電壓範圍               | 350 ~ 500VDC   |   |      |      |      |
| Rated Capacitance Range<br>容量範圍             | 820~22,000uF   |   |      |      |      |
| Leakage Current<br>洩漏電流                     | $I \leq 0.02CV$ ( $\mu A$ ) or 5mA, whichever is smaller. ( After 5 minutes application of DC rated voltage, at 20 °C)   |   |      |      |      |
| Dissipation Factor<br>散逸因素( $\tan \delta$ ) | Measurement Frequency: 120Hz. Temperature: 20°C  |   |      |      |      |
|   | Rated Voltage(V)   | 350                                     | 400  | 450  | 500  |
|   | $\tan \delta$ (MAX)  | 0.20                                    | 0.20 | 0.20 | 0.25 |
| Temperature Stability<br>溫度特性               | Measurement Frequency: 120Hz.  |   |      |      |      |
|   | Capacitance Change $C(-25^{\circ}C)/Z(20^{\circ}C) \geq 0.6$   |   |      |      |      |
| Load Life 負荷壽命                              | 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 for 5,000 hours at 85°C.   |   |      |      |      |
|   | Capacitance Change   | Within ± 20% of Initial Value           |      |      |      |
|   | $\tan \delta$  | 200% or less of Initial Specified Value |      |      |      |
|   | Leakage Current  | Initial Specified Value or less         |      |      |      |
| Shelf Life 放置壽命                             | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4. |   |      |      |      |
|   | Capacitance Change   | Within ± 20% of Initial Value           |      |      |      |
|   | $\tan \delta$  | 200% or less of Initial Specified Value |      |      |      |
|   | Leakage Current  | Initial Specified Value or less         |      |      |      |
| Standards 參照標準                              | IEC 60384-4 (JIS C 5101-4)   |   |      |      |      |

## Frequency Coefficient of Permissible Ripple Current

| Rated Voltage (V) | Frequency (Hz) |      |      |      |      |
|-------------------|----------------|------|------|------|------|
|                   | 50             | 120  | 300  | 1K   | ≥10K |
| 350 ~ 500         | 0.80           | 1.00 | 1.20 | 1.30 | 1.40 |

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## DIMENSIONS(mm)



## TERMINAL PITCH(W) & LENGTH (e) TABLE

| $\Phi D$ | P    | e  | $\alpha$ |
|----------|------|----|----------|
| 51       | 22   | 6  | 3        |
| 64       | 28.6 | 6  | 3        |
| 76       | 31.8 | 6  | 3        |
| 90       | 31.8 | 6  | 3        |
| 100      | 41.5 | 10 | 4        |

## DIMENSIONS OF MOUNTING BRACKET

unit:mm

| Cap<br>( $\mu F$ ) | Leg<br>shape   | 3-Legs   |           |           |           |           | 2-Legs     |           |           |           |           |
|--------------------|----------------|----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|
|                    |                | $\Phi D$ | $\Phi 51$ | $\Phi 64$ | $\Phi 76$ | $\Phi 90$ | $\Phi 100$ | $\Phi 51$ | $\Phi 64$ | $\Phi 76$ | $\Phi 90$ |
|                    | W1             |          | 31.8      | 38.1      | 44.5      | 50.8      | 57.5       | 34        | 40.5      | 46.5      | 54        |
|                    | W2             |          | 38.1      | 42.6      | 49.2      | 55.6      | 63.5       | 40        | 46.5      | 53        | 60        |
|                    | T1             |          | 7         | 7         | 7         | 7         | 8          | 7         | 7         | 7         | 7         |
|                    | T2             |          | 14        | 14        | 14        | 14        | 15         | 14        | 14        | 14        | 14        |
|                    | S              |          | 5         | 5         | 5         | 5         | 6          | 5         | 5         | 5         | 5         |
|                    | $\theta^\circ$ |          | 60        | 60        | 60        | 60        | 60         | 45        | 45        | 45        | 45        |
|                    | H              |          | 30        | 30        | 30        | 30        | 51.2       | 30        | 30        | 30        | 30        |
|                    | h              |          | 24        | 24        | 24        | 24        | 50         | 24        | 24        | 24        | 24        |

## STANDARD RATINGS

DxL(mm), R.C : (A rms) at 85°C 120 Hz

| Cap<br>( $\mu F$ ) | V | 350   |       | 400    |       | 450    |       | 500    |       |
|--------------------|---|-------|-------|--------|-------|--------|-------|--------|-------|
|                    |   | Item  | D x L | R.C.   | D x L | R.C.   | D x L | R.C.   | D x L |
| 820                |   |       |       |        |       | 51x60  | 4.00  |        |       |
| 1000               |   |       |       |        | 51x60 | 4.40   | 51x75 | 4.80   |       |
| 1200               |   | 51x60 | 4.90  |        |       | 51x85  | 5.60  |        |       |
|                    |   |       |       | 51x96  | 5.70  |        |       |        |       |
| 1500               |   |       |       | 51x75  | 5.90  | 51x96  | 6.30  | 64x115 | 8.6   |
|                    |   | 51x75 | 6.50  | 51x85  | 6.80  | 51x115 | 7.60  | 64x130 | 10.0  |
| 1800               |   |       |       | 51x96  | 7.00  |        |       |        |       |
|                    |   | 51x85 | 7.50  | 51x105 | 8.00  | 51x130 | 8.80  | 64x155 | 11.7  |
| 2200               |   | 51x96 | 7.70  |        |       |        |       |        |       |

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STANDARD RATINGS

DxL(mm), R.C : (A rms) at 85°C 120 Hz.

| Cap<br>( $\mu$ F) | V<br>Item | 350     |      | 400     |      | 450     |      | 500    |      |
|-------------------|-----------|---------|------|---------|------|---------|------|--------|------|
|                   |           | D x L   | R.C. | D x L   | R.C. | D x L   | R.C. | D x L  | R.C. |
| 2700              |           | 51x115  | 9.30 | 51x130  | 9.80 | 64x115  | 10.1 | 76x120 | 15.0 |
| 3300              |           | 51x130  | 10.8 | 64x115  | 11.1 | 64x130  | 11.7 | 76x145 | 17.5 |
| 3900              |           | 64x115  | 12.1 | 64x130  | 12.7 | 64x155  | 13.8 | 76x155 | 20.2 |
|                   |           |         |      |         |      | 76x115  | 13.4 |        |      |
| 4700              |           | 64x130  | 14.0 | 64x155  | 15.2 | 64x190  | 16.7 | 90x135 | 21.8 |
|                   |           |         |      | 76x115  | 14.7 | 76x130  | 15.5 |        |      |
| 5600              |           | 64x155  | 16.6 | 64x190  | 18.2 | 76x155  | 18.3 | 90x160 | 25.3 |
|                   |           | 76x115  | 16.1 | 76x130  | 16.9 |         |      |        |      |
| 6800              |           | 64x190  | 20.0 | 76x155  | 20.2 | 76x170  | 20.7 | 90x175 | 29.0 |
|                   |           | 76x130  | 18.6 |         |      |         |      |        |      |
| 8200              |           | 76x155  | 22.2 | 76x170  | 22.8 | 90x155  | 24.1 |        |      |
| 10000             |           | 76x170  | 25.2 | 90x155  | 26.6 | 90x170  | 27.8 |        |      |
| 12000             |           | 90x155  | 29.1 | 90x170  | 30.0 | 100x190 | 29.3 |        |      |
| 15000             |           | 90x190  | 35.7 | 100x190 | 33.7 | 100x250 | 37.0 |        |      |
| 18000             |           | 100x190 | 36.9 | 100x220 | 37.4 |         |      |        |      |
| 22000             |           | 100x250 | 46.1 |         |      |         |      |        |      |