

LSY SERIES

85°C 5000 hours, Miniaturized, Screw Terminal Type

◆FEATURES

- Load Life : 85°C 5000 hours.
- Smaller size the LSU series.
- RoHS compliance.



◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | |
|--|---|--------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|---------|------|------|------|------|--|-----|------|------|------|------|--|
| Category Temperature Range | -25~+85°C | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 350~500Vdc | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | $I=3\sqrt{CV}$ or 5mA whichever is smaller.(After 5 minutes application of rated voltage) I =Leakage Current(μ A) C =Capacitance(μ F) V =Rated Voltage(Vdc) | | | | | | | | | | | | | | | | | | |
| (tan δ) Dissipation Factor(MAX) | <table border="1"> <thead> <tr> <th>Vdc \ ϕD</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> <th>(20°C, 120Hz)</th> </tr> </thead> <tbody> <tr> <td>350~450</td> <td>0.20</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> <td></td> </tr> <tr> <td>500</td> <td>0.30</td> <td>0.30</td> <td>0.30</td> <td>0.30</td> <td></td> </tr> </tbody> </table> | Vdc \ ϕ D | 51 | 64 | 77 | 90 | (20°C, 120Hz) | 350~450 | 0.20 | 0.25 | 0.25 | 0.25 | | 500 | 0.30 | 0.30 | 0.30 | 0.30 | |
| Vdc \ ϕ D | 51 | 64 | 77 | 90 | (20°C, 120Hz) | | | | | | | | | | | | | | |
| 350~450 | 0.20 | 0.25 | 0.25 | 0.25 | | | | | | | | | | | | | | | |
| 500 | 0.30 | 0.30 | 0.30 | 0.30 | | | | | | | | | | | | | | | |
| Endurance | <p>After applying rated voltage with rated ripple current for 5000 hours at 85°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table> | Capacitance Change | Within ±20% of the initial value. | Dissipation Factor | Not more than 200% of the specified value. | Leakage Current | Not more than the specified value. | | | | | | | | | | | | |
| Capacitance Change | Within ±20% of the initial value. | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value. | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | | | | |

◆MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | | 60 (50) | 120 (100) | 300 | 500 | 1k | 10k \leq |
|----------------|------------|---------|-----------|------|------|------|------------|
| Coefficient | 350~450Vdc | 0.80 | 1.00 | 1.17 | 1.23 | 1.30 | 1.40 |
| | 500Vdc | 0.80 | 1.00 | 1.15 | 1.20 | 1.25 | 1.30 |

◆PART NUMBER

□□□ LSY □□□□□ M □□□ □□ D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Clamp Code Case Size

◆Dimensions in mm (not to scale)

| | | (mm) | | | | | |
|--------|----------|------|------|-----|-----|----|------|
| | ϕ D | W1 | W2 | W3 | W4 | W5 | F |
| I type | 51 | 34.0 | 40.0 | 3.5 | 6.0 | 12 | 21.8 |
| | 64 | 40.0 | 45.0 | 4.5 | 7.0 | 12 | 28.2 |
| | 77 | 47.0 | 53.0 | 4.5 | 6.0 | 12 | 31.4 |
| Y type | 90 | 54.0 | 60.0 | 4.5 | 6.0 | 14 | 31.4 |
| | 51 | 32.5 | 37.5 | 4.5 | 6.0 | 12 | 21.8 |
| | 64 | 38.0 | 43.0 | 4.5 | 8.0 | 14 | 28.2 |
| | 77 | 44.5 | 49.0 | 4.5 | 7.0 | 14 | 31.4 |
| | 90 | 50.8 | 56.0 | 4.5 | 8.0 | 16 | 31.4 |

◆STANDARD SIZE

| Rated Voltage (Vdc) | Capacitance (μ F) | Size ϕ DXL (mm) | Ripple Current (A.r.m.s. 85°C,120Hz) |
|---------------------|------------------------|----------------------|--------------------------------------|
| 350 | 2200 | 51×83 | 7.4 |
| | 2700 | 51×98 | 8.4 |
| | 3300 | 51×118 | 9.5 |
| | 3900 | 51×133 | 10.5 |
| | 4700 | 64×102 | 12.3 |
| | 5600 | 64×119 | 13.7 |
| | 6800 | 64×139 | 15.4 |
| | 8200 | 77×116 | 18.7 |
| | 10000 | 77×136 | 21.1 |
| | 12000 | 77×176 | 24.0 |
| | 15000 | 90×146 | 30.7 |
| | 18000 | 90×171 | 34.5 |
| 400 | 22000 | 90×221 | 40.4 |
| | 2700 | 51×113 | 8.8 |
| | 3300 | 51×133 | 10.0 |
| | 3900 | 64×99 | 11.6 |
| | 4700 | 64×134 | 12.9 |
| | 5600 | 64×144 | 14.7 |
| | 6800 | 77×121 | 18.0 |
| | 8200 | 77×141 | 20.2 |
| | 10000 | 77×176 | 23.0 |
| | 12000 | 90×176 | 30.4 |
| | 15000 | 90×181 | 33.5 |
| | 18000 | 90×211 | 37.5 |

| Rated Voltage (Vdc) | Capacitance (μ F) | Size ϕ DXL (mm) | Ripple Current (A.r.m.s. 85°C,120Hz) |
|---------------------|------------------------|----------------------|--------------------------------------|
| 450 | 2200 | 51×113 | 8.3 |
| | 2700 | 51×133 | 9.4 |
| | 3300 | 64×104 | 11.1 |
| | 3900 | 64×134 | 12.7 |
| | 4700 | 77×116 | 15.5 |
| | 5600 | 77×136 | 17.3 |
| | 6800 | 77×146 | 19.2 |
| | 8200 | 77×176 | 21.5 |
| | 10000 | 90×176 | 28.7 |
| | 12000 | 90×176 | 31.0 |
| | 15000 | 90×216 | 35.7 |
| | 500 | 1500 | 51×98 |
| 1800 | | 51×133 | 7.0 |
| 2200 | | 51×143 | 7.7 |
| 2700 | | 64×114 | 9.0 |
| 3300 | | 64×134 | 10.2 |
| 4700 | | 77×136 | 14.2 |
| 5600 | | 77×176 | 16.6 |
| 6800 | | 90×176 | 22.2 |
| 8200 | | 90×176 | 24.2 |
| 10000 | | 90×211 | 27.4 |

◆Tightening torque of bolt and Permissible current of terminal.

| Clamp Bolt | Recommended Tightening torque |
|------------|-------------------------------|
| M3 | 0.6 [N·m] |
| M4 | 1.3 [N·m] |

| Terminal | Recommended Tightening torque (Permissible Range) | Permissible Current of Terminal |
|----------|---|---------------------------------|
| M5 | 2.2(1.5~3.2) [N·m] | 60Arms |