

LS series

Snap-in Terminal Type, 85°C Standard

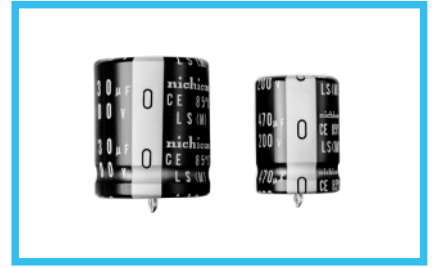
Anti-Solvent  
Feature  
(Through  
100V only)

- Withstanding 3000 hours application of rated ripple current at 85°C.
- Compliant to the RoHS directive (2002/95/EC).

LS

Smaller

LG



## ■ Specifications

|                               |                                                                                                                                                                                                                            |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------|-----------|------|------|------------|------|------|------------|------|------|------|------|------|---------------------------------------------------|-----------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Item                          | Performance Characteristics                                                                                                                                                                                                |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Category Temperature Range    | − 40 to +85°C (16 to 250V), − 25 to +85°C (350 to 450V)                                                                                                                                                                    |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rated Voltage Range           | 16 to 450V                                                                                                                                                                                                                 |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rated Capacitance Range       | 56 to 56000μF                                                                                                                                                                                                              |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capacitance Tolerance         | ± 20% at 120Hz, 20°C                                                                                                                                                                                                       |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leakage Current               | $I \leq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)]                                                                                                      |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tangent of loss angle (tan δ) | Measurement frequency :120Hz at 20°C                                                                                                                                                                                       |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Rated voltage (V)                                                                                                                                                                                                          | 16              | 25   | 35        | 50   | 63   | 80         | 100  | 160  | 180        | 200  | 250  | 350  | 400  | 450  |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | tan δ (MAX.)                                                                                                                                                                                                               | 0.50            | 0.40 | 0.35      | 0.30 | 0.25 | 0.20       | 0.20 | 0.15 | 0.15       | 0.15 | 0.15 | 0.15 | 0.15 | 0.20 |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stability at Low Temperature  | Measurement frequency : 120Hz                                                                                                                                                                                              |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Rated voltage (V)                                                                                                                                                                                                          |                 |      | 16 to 100 |      |      | 160 to 250 |      |      | 350 to 450 |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | Impedance ratio<br>ZT/Z20(MAX.)                                                                                                                                                                                            | Z − 25°C/Z+20°C |      |           | 4    |      |            | 3    |      |            | 8    |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               |                                                                                                                                                                                                                            | Z − 40°C/Z+20°C |      |           | 20   |      |            | 12   |      |            | —    |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 3000 hours at 85°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 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 requirements listed at right.                        |                 |      |           |      |      |            |      |      |            |      |      |      |      |      |                                                   |                                               |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               |                                                                                                                                                                                                                            |                 |      |           |      |      |            |      |      |            |      |      |      |      |      | Capacitance change                                | Within ±15% of the initial capacitance value  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               |                                                                                                                                                                                                                            |                 |      |           |      |      |            |      |      |            |      |      |      |      |      | tan δ                                             | 150% 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



(PC board hole dimensions)

(Terminal dimensions)

\* The other terminal is also available upon request.  
Please refer to page 280 for schematic of dimensions.

## Type numbering system ( Example : 200V 390μF)



## ● Frequency coefficient of rated ripple current

| Frequency (Hz) | 50   | 60   | 120  | 300  | 1 k  | 10k  | 50k or more |
|----------------|------|------|------|------|------|------|-------------|
| 16 to 100V     | 0.88 | 0.90 | 1.00 | 1.07 | 1.15 | 1.15 | 1.15        |
| 160 to 250V    | 0.81 | 0.85 | 1.00 | 1.17 | 1.32 | 1.45 | 1.50        |
| 350 to 450V    | 0.77 | 0.82 | 1.00 | 1.16 | 1.30 | 1.41 | 1.43        |

Minimum order quantity : 50pcs.

● Dimension table in next page.

## ■Dimensions

| 16V (1C)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 8200         | 22 × 25            | 2560                 | 1.08                       | LLS1C822MELZ |
| 10000        | 22 × 30            | 2890                 | 1.20                       | LLS1C103MELZ |
| 12000        | 22 × 30            | 3130                 | 1.31                       | LLS1C123MELZ |
|              | 25 × 25            | 3010                 | 1.31                       | LLS1C123MELA |
| 15000        | 22 × 35            | 3690                 | 1.46                       | LLS1C153MELZ |
|              | 25 × 30            | 3640                 | 1.46                       | LLS1C153MELA |
|              | 30 × 25            | 3730                 | 1.46                       | LLS1C153MELB |
| 18000        | 22 × 40            | 3980                 | 1.60                       | LLS1C183MELZ |
|              | 25 × 35            | 3980                 | 1.60                       | LLS1C183MELA |
|              | 30 × 30            | 3880                 | 1.60                       | LLS1C183MELB |
| 22000        | 22 × 50            | 4520                 | 1.77                       | LLS1C223MELZ |
|              | 25 × 40            | 4440                 | 1.77                       | LLS1C223MELA |
|              | 30 × 30            | 4380                 | 1.77                       | LLS1C223MELB |
| 27000        | 25 × 45            | 4980                 | 1.97                       | LLS1C273MELA |
|              | 30 × 35            | 4950                 | 1.97                       | LLS1C273MELB |
|              | 35 × 30            | 4820                 | 1.97                       | LLS1C273MELC |
| 33000        | 25 × 50            | 5490                 | 2.17                       | LLS1C333MELA |
|              | 30 × 40            | 5600                 | 2.17                       | LLS1C333MELB |
|              | 35 × 30            | 5460                 | 2.17                       | LLS1C333MELC |
| 39000        | 30 × 45            | 6210                 | 2.36                       | LLS1C393MELB |
|              | 35 × 35            | 6120                 | 2.36                       | LLS1C393MELC |
| 47000        | 30 × 50            | 6930                 | 2.60                       | LLS1C473MELB |
|              | 35 × 40            | 6890                 | 2.60                       | LLS1C473MELC |
| 56000        | 35 × 45            | 7690                 | 2.83                       | LLS1C563MELC |

| 25V (1E)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 5600         | 22 × 25            | 2310                 | 1.12                       | LLS1E562MELZ |
| 6800         | 22 × 30            | 2560                 | 1.23                       | LLS1E682MELZ |
|              | 25 × 25            | 2470                 | 1.23                       | LLS1E682MELA |
| 8200         | 22 × 35            | 2860                 | 1.35                       | LLS1E822MELZ |
|              | 25 × 25            | 2780                 | 1.35                       | LLS1E822MELA |
| 10000        | 22 × 35            | 3310                 | 1.50                       | LLS1E103MELZ |
|              | 25 × 30            | 3160                 | 1.50                       | LLS1E103MELA |
| 12000        | 22 × 40            | 3770                 | 1.64                       | LLS1E123MELZ |
|              | 25 × 35            | 3630                 | 1.64                       | LLS1E123MELA |
|              | 30 × 25            | 3800                 | 1.64                       | LLS1E123MELB |
| 15000        | 22 × 50            | 4210                 | 1.83                       | LLS1E153MELZ |
|              | 25 × 40            | 4100                 | 1.83                       | LLS1E153MELA |
|              | 30 × 30            | 4000                 | 1.83                       | LLS1E153MELB |
| 18000        | 25 × 45            | 4680                 | 2.01                       | LLS1E183MELA |
|              | 30 × 35            | 4660                 | 2.01                       | LLS1E183MELB |
|              | 35 × 30            | 4680                 | 2.01                       | LLS1E183MELC |
| 22000        | 25 × 50            | 5190                 | 2.22                       | LLS1E223MELA |
|              | 30 × 40            | 5330                 | 2.22                       | LLS1E223MELB |
|              | 35 × 35            | 5260                 | 2.22                       | LLS1E223MELC |
| 27000        | 30 × 45            | 6020                 | 2.46                       | LLS1E273MELB |
|              | 35 × 40            | 6020                 | 2.46                       | LLS1E273MELC |
| 33000        | 35 × 45            | 6750                 | 2.72                       | LLS1E333MELC |
| 39000        | 35 × 50            | 7560                 | 2.96                       | LLS1E393MELC |

| 35V (1V)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 3900         | 22 × 25            | 2220                 | 1.10                       | LLS1V392MELZ |
| 4700         | 22 × 30            | 2460                 | 1.21                       | LLS1V472MELZ |
|              | 25 × 25            | 2430                 | 1.21                       | LLS1V472MELA |
| 5600         | 22 × 35            | 2790                 | 1.32                       | LLS1V562MELZ |
|              | 25 × 30            | 2750                 | 1.32                       | LLS1V562MELA |
| 6800         | 22 × 40            | 2970                 | 1.46                       | LLS1V682MELZ |
|              | 25 × 30            | 2890                 | 1.46                       | LLS1V682MELA |
|              | 30 × 25            | 3090                 | 1.46                       | LLS1V682MELB |
| 8200         | 22 × 45            | 3470                 | 1.60                       | LLS1V822MELZ |
|              | 25 × 35            | 3330                 | 1.60                       | LLS1V822MELA |
|              | 30 × 30            | 3290                 | 1.60                       | LLS1V822MELB |
| 10000        | 22 × 50            | 3750                 | 1.77                       | LLS1V103MELZ |
|              | 25 × 40            | 3650                 | 1.77                       | LLS1V103MELA |
|              | 30 × 30            | 3610                 | 1.77                       | LLS1V103MELB |
| 12000        | 25 × 45            | 4150                 | 1.94                       | LLS1V123MELA |
|              | 30 × 35            | 4140                 | 1.94                       | LLS1V123MELB |
|              | 35 × 30            | 4270                 | 1.94                       | LLS1V123MELC |
| 15000        | 25 × 50            | 4800                 | 2.17                       | LLS1V153MELA |
|              | 30 × 40            | 4800                 | 2.17                       | LLS1V153MELB |
|              | 35 × 35            | 4950                 | 2.17                       | LLS1V153MELC |
| 18000        | 30 × 45            | 5300                 | 2.38                       | LLS1V183MELB |
|              | 35 × 40            | 5710                 | 2.38                       | LLS1V183MELC |
| 22000        | 35 × 45            | 6380                 | 2.63                       | LLS1V223MELC |
| 27000        | 35 × 50            | 6900                 | 2.91                       | LLS1V273MELC |

| 50V (1H)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 2200         | 22 × 25            | 1930                 | 0.99                       | LLS1H222MELZ |
| 2700         | 22 × 30            | 2210                 | 1.10                       | LLS1H272MELZ |
| 3300         | 22 × 30            | 2410                 | 1.21                       | LLS1H332MELZ |
|              | 25 × 25            | 2380                 | 1.21                       | LLS1H332MELA |
| 3900         | 22 × 35            | 2720                 | 1.32                       | LLS1H392MELZ |
|              | 25 × 30            | 2680                 | 1.32                       | LLS1H392MELA |
| 4700         | 22 × 40            | 3020                 | 1.45                       | LLS1H472MELZ |
|              | 25 × 30            | 3070                 | 1.45                       | LLS1H472MELA |
|              | 30 × 25            | 3010                 | 1.45                       | LLS1H472MELB |
| 5600         | 22 × 45            | 3430                 | 1.58                       | LLS1H562MELZ |
|              | 25 × 35            | 3470                 | 1.58                       | LLS1H562MELA |
|              | 30 × 30            | 3430                 | 1.58                       | LLS1H562MELB |
| 6800         | 22 × 50            | 3940                 | 1.74                       | LLS1H682MELZ |
|              | 25 × 40            | 3870                 | 1.74                       | LLS1H682MELA |
|              | 30 × 35            | 3930                 | 1.74                       | LLS1H682MELB |
| 8200         | 25 × 45            | 4440                 | 1.92                       | LLS1H822MELA |
|              | 30 × 35            | 4470                 | 1.92                       | LLS1H822MELB |
|              | 35 × 30            | 4410                 | 1.92                       | LLS1H822MELC |
| 10000        | 30 × 40            | 5080                 | 2.12                       | LLS1H103MELB |
|              | 35 × 35            | 4920                 | 2.12                       | LLS1H103MELC |
| 12000        | 30 × 50            | 5720                 | 2.32                       | LLS1H123MELB |
|              | 35 × 40            | 5690                 | 2.32                       | LLS1H123MELC |
| 15000        | 35 × 45            | 6560                 | 2.59                       | LLS1H153MELC |
| 18000        | 35 × 50            | 7140                 | 2.84                       | LLS1H183MELC |

Rated ripple current (mA<sub>rms</sub>) at 85°C 120Hz

## ■Dimensions

| 63V (1J)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 1800         | 22 × 25            | 1900                 | 1.01                       | LLS1J182MELZ |
| 2200         | 22 × 30            | 2350                 | 1.11                       | LLS1J222MELZ |
|              | 25 × 25            | 2300                 | 1.11                       | LLS1J222MELA |
| 2700         | 22 × 35            | 2500                 | 1.23                       | LLS1J272MELZ |
|              | 25 × 30            | 2520                 | 1.23                       | LLS1J272MELA |
| 3300         | 22 × 35            | 2720                 | 1.36                       | LLS1J332MELZ |
|              | 25 × 30            | 2740                 | 1.36                       | LLS1J332MELA |
|              | 30 × 25            | 2840                 | 1.36                       | LLS1J332MELB |
| 3900         | 22 × 40            | 3090                 | 1.48                       | LLS1J392MELZ |
|              | 25 × 35            | 3130                 | 1.48                       | LLS1J392MELA |
|              | 30 × 30            | 3090                 | 1.48                       | LLS1J392MELB |
| 4700         | 22 × 50            | 3690                 | 1.63                       | LLS1J472MELZ |
|              | 25 × 40            | 3590                 | 1.63                       | LLS1J472MELA |
|              | 30 × 30            | 3540                 | 1.63                       | LLS1J472MELB |
| 5600         | 25 × 45            | 4010                 | 1.78                       | LLS1J562MELA |
|              | 30 × 35            | 4000                 | 1.78                       | LLS1J562MELB |
|              | 35 × 30            | 3750                 | 1.78                       | LLS1J562MELC |
| 6800         | 25 × 50            | 4520                 | 1.96                       | LLS1J682MELA |
|              | 30 × 40            | 4550                 | 1.96                       | LLS1J682MELB |
|              | 35 × 30            | 4440                 | 1.96                       | LLS1J682MELC |
| 8200         | 30 × 45            | 5120                 | 2.15                       | LLS1J822MELB |
|              | 35 × 35            | 5050                 | 2.15                       | LLS1J822MELC |
| 10000        | 30 × 50            | 5780                 | 2.38                       | LLS1J103MELB |
|              | 35 × 40            | 5750                 | 2.38                       | LLS1J103MELC |
| 12000        | 35 × 45            | 6470                 | 2.60                       | LLS1J123MELC |

| 80V (1K)     |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 1200         | 22 × 25            | 1770                 | 0.92                       | LLS1K122MELZ |
| 1500         | 22 × 30            | 2010                 | 1.03                       | LLS1K152MELZ |
| 1800         | 22 × 30            | 2110                 | 1.13                       | LLS1K182MELZ |
|              | 25 × 25            | 2260                 | 1.13                       | LLS1K182MELA |
| 2200         | 22 × 35            | 2530                 | 1.25                       | LLS1K222MELZ |
|              | 25 × 30            | 2530                 | 1.25                       | LLS1K222MELA |
|              | 30 × 25            | 2560                 | 1.25                       | LLS1K222MELB |
| 2700         | 22 × 40            | 2930                 | 1.39                       | LLS1K272MELZ |
|              | 25 × 35            | 2930                 | 1.39                       | LLS1K272MELA |
|              | 30 × 30            | 2910                 | 1.39                       | LLS1K272MELB |
| 3300         | 22 × 45            | 3230                 | 1.54                       | LLS1K332MELZ |
|              | 25 × 40            | 3290                 | 1.54                       | LLS1K332MELA |
|              | 30 × 30            | 3250                 | 1.54                       | LLS1K332MELB |
| 3900         | 22 × 50            | 3620                 | 1.67                       | LLS1K392MELZ |
|              | 25 × 45            | 3710                 | 1.67                       | LLS1K392MELA |
|              | 30 × 35            | 3700                 | 1.67                       | LLS1K392MELB |
| 4700         | 25 × 50            | 4280                 | 1.83                       | LLS1K472MELA |
|              | 30 × 40            | 4230                 | 1.83                       | LLS1K472MELB |
|              | 35 × 30            | 4120                 | 1.83                       | LLS1K472MELC |
| 5600         | 30 × 45            | 4700                 | 2.00                       | LLS1K562MELB |
|              | 35 × 35            | 4640                 | 2.00                       | LLS1K562MELC |
| 6800         | 30 × 50            | 5270                 | 2.21                       | LLS1K682MELB |
|              | 35 × 40            | 5240                 | 2.21                       | LLS1K682MELC |
| 8200         | 35 × 45            | 5890                 | 2.42                       | LLS1K822MELC |
| 10000        | 35 × 50            | 6630                 | 2.68                       | LLS1K103MELC |

| 100V (2A)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 820          | 22 × 25            | 1860                 | 0.85                       | LLS2A821MELZ |
| 1000         | 22 × 30            | 2020                 | 0.94                       | LLS2A102MELZ |
| 1200         | 22 × 30            | 2120                 | 1.03                       | LLS2A122MELZ |
|              | 25 × 25            | 2110                 | 1.03                       | LLS2A122MELA |
| 1500         | 22 × 35            | 2450                 | 1.16                       | LLS2A152MELZ |
|              | 25 × 30            | 2470                 | 1.16                       | LLS2A152MELA |
|              | 30 × 25            | 2560                 | 1.16                       | LLS2A152MELB |
| 1800         | 22 × 40            | 2770                 | 1.27                       | LLS2A182MELZ |
|              | 25 × 35            | 2810                 | 1.27                       | LLS2A182MELA |
|              | 30 × 25            | 2650                 | 1.27                       | LLS2A182MELB |
| 2200         | 22 × 45            | 3150                 | 1.40                       | LLS2A222MELZ |
|              | 25 × 40            | 3210                 | 1.40                       | LLS2A222MELA |
|              | 30 × 30            | 3170                 | 1.40                       | LLS2A222MELB |
| 2700         | 25 × 45            | 3660                 | 1.55                       | LLS2A272MELA |
|              | 30 × 35            | 3650                 | 1.55                       | LLS2A272MELB |
|              | 35 × 30            | 3770                 | 1.55                       | LLS2A272MELC |
| 3300         | 25 × 50            | 4150                 | 1.72                       | LLS2A332MELA |
|              | 30 × 40            | 4180                 | 1.72                       | LLS2A332MELB |
|              | 35 × 35            | 4070                 | 1.72                       | LLS2A332MELC |
| 3900         | 30 × 45            | 4670                 | 1.87                       | LLS2A392MELB |
|              | 35 × 35            | 4610                 | 1.87                       | LLS2A392MELC |
| 4700         | 30 × 50            | 5260                 | 2.05                       | LLS2A472MELB |
|              | 35 × 40            | 5230                 | 2.05                       | LLS2A472MELC |
| 5600         | 35 × 45            | 5880                 | 2.24                       | LLS2A562MELC |
| 6800         | 35 × 50            | 6010                 | 2.47                       | LLS2A682MELC |

Rated ripple current (mA<sub>rms</sub>) at 85°C 120Hz

## ■ Dimensions

| 160V (2C)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 270          | 20 × 25            | 1280                 | 0.62                       | LLS2C271MELY |
| 330          | 20 × 25            | 1550                 | 0.68                       | LLS2C331MELY |
| 390          | 20 × 30            | 1630                 | 0.74                       | LLS2C391MELY |
|              | 22 × 25            | 1630                 | 0.74                       | LLS2C391MELZ |
| 470          | 20 × 30            | 1900                 | 0.82                       | LLS2C471MELY |
|              | 22 × 30            | 1860                 | 0.82                       | LLS2C471MELZ |
|              | 25 × 25            | 1860                 | 0.82                       | LLS2C471MELA |
| 560          | 20 × 35            | 2140                 | 0.89                       | LLS2C561MELY |
|              | 22 × 30            | 2150                 | 0.89                       | LLS2C561MELZ |
|              | 25 × 25            | 2150                 | 0.89                       | LLS2C561MELA |
| 680          | 20 × 40            | 2350                 | 0.98                       | LLS2C681MELY |
|              | 22 × 35            | 2350                 | 0.98                       | LLS2C681MELZ |
|              | 25 × 30            | 2330                 | 0.98                       | LLS2C681MELA |
|              | 30 × 25            | 2330                 | 0.98                       | LLS2C681MELB |
| 820          | 22 × 40            | 2680                 | 1.08                       | LLS2C821MELZ |
|              | 25 × 30            | 2650                 | 1.08                       | LLS2C821MELA |
|              | 30 × 25            | 2640                 | 1.08                       | LLS2C821MELB |
| 1000         | 22 × 45            | 3020                 | 1.20                       | LLS2C102MELZ |
|              | 25 × 35            | 3000                 | 1.20                       | LLS2C102MELA |
|              | 30 × 30            | 2960                 | 1.20                       | LLS2C102MELB |
| 1200         | 25 × 40            | 3430                 | 1.31                       | LLS2C122MELA |
|              | 30 × 30            | 3410                 | 1.31                       | LLS2C122MELB |
|              | 35 × 25            | 3400                 | 1.31                       | LLS2C122MELC |
| 1500         | 25 × 50            | 3960                 | 1.46                       | LLS2C152MELA |
|              | 30 × 35            | 3960                 | 1.46                       | LLS2C152MELB |
|              | 35 × 30            | 3940                 | 1.46                       | LLS2C152MELC |
| 1800         | 30 × 40            | 4310                 | 1.60                       | LLS2C182MELB |
|              | 35 × 35            | 4280                 | 1.60                       | LLS2C182MELC |
| 2200         | 30 × 50            | 4960                 | 1.77                       | LLS2C222MELB |
|              | 35 × 40            | 4960                 | 1.77                       | LLS2C222MELC |
| 2700         | 35 × 45            | 5570                 | 1.97                       | LLS2C272MELC |

| 180V (2Z)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 270          | 20 × 25            | 1290                 | 0.66                       | LLS2Z271MELY |
| 330          | 20 × 30            | 1770                 | 0.73                       | LLS2Z331MELY |
|              | 22 × 25            | 1770                 | 0.73                       | LLS2Z331MELZ |
| 390          | 20 × 30            | 1840                 | 0.79                       | LLS2Z391MELY |
|              | 22 × 25            | 1840                 | 0.79                       | LLS2Z391MELZ |
| 470          | 20 × 35            | 1910                 | 0.87                       | LLS2Z471MELY |
|              | 22 × 30            | 1910                 | 0.87                       | LLS2Z471MELZ |
|              | 25 × 25            | 2080                 | 0.87                       | LLS2Z471MELA |
| 560          | 20 × 40            | 2150                 | 0.95                       | LLS2Z561MELY |
|              | 22 × 35            | 2250                 | 0.95                       | LLS2Z561MELZ |
|              | 25 × 25            | 2150                 | 0.95                       | LLS2Z561MELA |
| 680          | 22 × 35            | 2480                 | 1.04                       | LLS2Z681MELZ |
|              | 25 × 30            | 2500                 | 1.04                       | LLS2Z681MELA |
|              | 30 × 25            | 2460                 | 1.04                       | LLS2Z681MELB |
| 820          | 22 × 40            | 2860                 | 1.15                       | LLS2Z821MELZ |
|              | 25 × 35            | 2750                 | 1.15                       | LLS2Z821MELA |
|              | 30 × 25            | 2690                 | 1.15                       | LLS2Z821MELB |
| 1000         | 22 × 50            | 3100                 | 1.27                       | LLS2Z102MELZ |
|              | 25 × 40            | 3060                 | 1.27                       | LLS2Z102MELA |
|              | 30 × 30            | 3100                 | 1.27                       | LLS2Z102MELB |
| 1200         | 25 × 45            | 3630                 | 1.39                       | LLS2Z122MELA |
|              | 30 × 35            | 3550                 | 1.39                       | LLS2Z122MELB |
|              | 35 × 30            | 3490                 | 1.39                       | LLS2Z122MELC |
| 1500         | 30 × 40            | 4100                 | 1.55                       | LLS2Z152MELB |
|              | 35 × 35            | 4020                 | 1.55                       | LLS2Z152MELC |
| 1800         | 30 × 45            | 4550                 | 1.70                       | LLS2Z182MELB |
|              | 35 × 35            | 4540                 | 1.70                       | LLS2Z182MELC |
| 2200         | 35 × 40            | 4830                 | 1.88                       | LLS2Z222MELC |
| 2700         | 35 × 50            | 5300                 | 2.09                       | LLS2Z272MELC |

| 200V (2D)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 220          | 20 × 25            | 1190                 | 0.62                       | LLS2D221MELY |
| 270          | 20 × 25            | 1390                 | 0.69                       | LLS2D271MELY |
|              | 22 × 25            | 1370                 | 0.69                       | LLS2D271MELZ |
| 330          | 20 × 30            | 1560                 | 0.77                       | LLS2D331MELY |
|              | 22 × 25            | 1510                 | 0.77                       | LLS2D331MELZ |
| 390          | 20 × 35            | 1740                 | 0.83                       | LLS2D391MELY |
|              | 22 × 30            | 1730                 | 0.83                       | LLS2D391MELZ |
|              | 25 × 25            | 1710                 | 0.83                       | LLS2D391MELA |
| 470          | 20 × 35            | 2030                 | 0.91                       | LLS2D471MELY |
|              | 22 × 30            | 1970                 | 0.91                       | LLS2D471MELZ |
|              | 25 × 25            | 1950                 | 0.91                       | LLS2D471MELA |
| 560          | 20 × 40            | 2180                 | 1.00                       | LLS2D561MELY |
|              | 22 × 35            | 2180                 | 1.00                       | LLS2D561MELZ |
|              | 25 × 30            | 2150                 | 1.00                       | LLS2D561MELA |
|              | 30 × 25            | 2150                 | 1.00                       | LLS2D561MELB |
| 680          | 22 × 40            | 2480                 | 1.10                       | LLS2D681MELZ |
|              | 25 × 30            | 2480                 | 1.10                       | LLS2D681MELA |
|              | 30 × 25            | 2480                 | 1.10                       | LLS2D681MELB |
| 820          | 22 × 45            | 2810                 | 1.21                       | LLS2D821MELZ |
|              | 25 × 35            | 2790                 | 1.21                       | LLS2D821MELA |
|              | 30 × 30            | 2800                 | 1.21                       | LLS2D821MELB |
| 1000         | 22 × 50            | 3280                 | 1.34                       | LLS2D102MELZ |
|              | 25 × 40            | 3280                 | 1.34                       | LLS2D102MELA |
|              | 30 × 35            | 3150                 | 1.34                       | LLS2D102MELB |
| 1200         | 30 × 35            | 3610                 | 1.46                       | LLS2D122MELB |
|              | 35 × 30            | 3570                 | 1.46                       | LLS2D122MELC |
| 1500         | 30 × 45            | 4130                 | 1.64                       | LLS2D152MELB |
|              | 35 × 35            | 4060                 | 1.64                       | LLS2D152MELC |
| 1800         | 30 × 50            | 4600                 | 1.80                       | LLS2D182MELB |
|              | 35 × 40            | 4590                 | 1.80                       | LLS2D182MELC |
| 2200         | 35 × 45            | 5250                 | 1.98                       | LLS2D222MELC |

| 250V (2E)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 180          | 20 × 25            | 1200                 | 0.63                       | LLS2E181MELY |
| 220          | 20 × 25            | 1260                 | 0.70                       | LLS2E221MELY |
|              | 22 × 25            | 1240                 | 0.70                       | LLS2E221MELZ |
| 270          | 20 × 30            | 1420                 | 0.77                       | LLS2E271MELY |
|              | 22 × 25            | 1500                 | 0.77                       | LLS2E271MELZ |
| 330          | 20 × 35            | 1680                 | 0.86                       | LLS2E331MELY |
|              | 22 × 30            | 1660                 | 0.86                       | LLS2E331MELZ |
|              | 25 × 25            | 1610                 | 0.86                       | LLS2E331MELA |
| 390          | 20 × 40            | 1920                 | 0.93                       | LLS2E391MELY |
|              | 22 × 35            | 1880                 | 0.93                       | LLS2E391MELZ |
|              | 25 × 30            | 1880                 | 0.93                       | LLS2E391MELA |
| 470          | 22 × 35            | 2150                 | 1.02                       | LLS2E471MELZ |
|              | 25 × 35            | 2150                 | 1.02                       | LLS2E471MELA |
|              | 30 × 25            | 2040                 | 1.02                       | LLS2E471MELB |
| 560          | 22 × 40            | 2480                 | 1.12                       | LLS2E561MELZ |
|              | 25 × 35            | 2350                 | 1.12                       | LLS2E561MELA |
|              | 30 × 25            | 2350                 | 1.12                       | LLS2E561MELB |
| 680          | 25 × 40            | 2670                 | 1.23                       | LLS2E681MELA |
|              | 30 × 30            | 2710                 | 1.23                       | LLS2E681MELB |
|              | 25 × 45            | 3010                 | 1.35                       | LLS2E821MELA |
| 820          | 30 × 35            | 2980                 | 1.35                       | LLS2E821MELB |
|              | 35 × 30            | 2960                 | 1.35                       | LLS2E821MELC |
| 1000         | 30 × 40            | 3560                 | 1.50                       | LLS2E102MELB |
|              | 35 × 35            | 3480                 | 1.50                       | LLS2E102MELC |
| 1200         | 30 × 45            | 3990                 | 1.64                       | LLS2E122MELB |
|              | 35 × 35            | 3840                 | 1.64                       | LLS2E122MELC |
| 1500         | 35 × 40            | 4330                 | 1.83                       | LLS2E152MELC |
| 1800         | 35 × 50            | 4540                 | 2.01                       | LLS2E182MELC |

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

## ■ Dimensions

| 350V (2V)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 120          | 20 × 30            | 960                  | 0.61                       | LLS2V121MELY |
|              | 22 × 25            | 1040                 | 0.61                       | LLS2V121MELZ |
| 150          | 20 × 30            | 1100                 | 0.68                       | LLS2V151MELY |
|              | 22 × 30            | 1200                 | 0.68                       | LLS2V151MELZ |
|              | 25 × 25            | 1220                 | 0.68                       | LLS2V151MELA |
| 180          | 20 × 35            | 1240                 | 0.75                       | LLS2V181MELY |
|              | 22 × 30            | 1340                 | 0.75                       | LLS2V181MELZ |
|              | 25 × 25            | 1370                 | 0.75                       | LLS2V181MELA |
| 220          | 22 × 35            | 1470                 | 0.83                       | LLS2V221MELZ |
|              | 25 × 30            | 1530                 | 0.83                       | LLS2V221MELA |
|              | 30 × 25            | 1540                 | 0.83                       | LLS2V221MELB |
| 270          | 22 × 40            | 1700                 | 0.92                       | LLS2V271MELZ |
|              | 25 × 35            | 1730                 | 0.92                       | LLS2V271MELA |
|              | 30 × 25            | 1800                 | 0.92                       | LLS2V271MELB |
| 330          | 22 × 45            | 1870                 | 1.01                       | LLS2V331MELZ |
|              | 25 × 35            | 1970                 | 1.01                       | LLS2V331MELA |
|              | 30 × 30            | 2030                 | 1.01                       | LLS2V331MELB |
| 390          | 25 × 40            | 2140                 | 1.10                       | LLS2V391MELA |
|              | 30 × 35            | 2230                 | 1.10                       | LLS2V391MELB |
|              | 35 × 30            | 2300                 | 1.10                       | LLS2V391MELC |
| 470          | 25 × 50            | 2550                 | 1.21                       | LLS2V471MELA |
|              | 30 × 35            | 2530                 | 1.21                       | LLS2V471MELB |
|              | 35 × 30            | 2550                 | 1.21                       | LLS2V471MELC |
| 560          | 30 × 40            | 2730                 | 1.32                       | LLS2V561MELB |
|              | 35 × 35            | 2750                 | 1.32                       | LLS2V561MELC |
| 680          | 30 × 50            | 3150                 | 1.46                       | LLS2V681MELB |
|              | 35 × 40            | 3150                 | 1.46                       | LLS2V681MELC |
| 820          | 35 × 45            | 3470                 | 1.60                       | LLS2V821MELC |
| 1000         | 35 × 50            | 3600                 | 1.77                       | LLS2V102MELC |

| 400V (2G)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 68           | 20 × 25            | 750                  | 0.49                       | LLS2G680MELY |
| 82           | 20 × 30            | 820                  | 0.54                       | LLS2G820MELY |
|              | 22 × 25            | 840                  | 0.54                       | LLS2G820MELZ |
| 100          | 20 × 30            | 950                  | 0.60                       | LLS2G101MELY |
|              | 22 × 25            | 950                  | 0.60                       | LLS2G101MELZ |
| 120          | 20 × 35            | 1070                 | 0.65                       | LLS2G121MELY |
|              | 22 × 30            | 1090                 | 0.65                       | LLS2G121MELZ |
|              | 25 × 25            | 1130                 | 0.65                       | LLS2G121MELA |
| 150          | 20 × 40            | 1220                 | 0.73                       | LLS2G151MELY |
|              | 22 × 35            | 1240                 | 0.73                       | LLS2G151MELZ |
|              | 25 × 30            | 1270                 | 0.73                       | LLS2G151MELA |
| 180          | 22 × 40            | 1410                 | 0.80                       | LLS2G181MELZ |
|              | 25 × 30            | 1440                 | 0.80                       | LLS2G181MELA |
|              | 30 × 25            | 1520                 | 0.80                       | LLS2G181MELB |
| 220          | 22 × 45            | 1580                 | 0.88                       | LLS2G221MELZ |
|              | 25 × 35            | 1640                 | 0.88                       | LLS2G221MELA |
|              | 30 × 30            | 1660                 | 0.88                       | LLS2G221MELB |
| 270          | 25 × 40            | 1790                 | 0.98                       | LLS2G271MELA |
|              | 30 × 30            | 1820                 | 0.98                       | LLS2G271MELB |
| 330          | 25 × 45            | 2000                 | 1.08                       | LLS2G331MELA |
|              | 30 × 35            | 2050                 | 1.08                       | LLS2G331MELB |
|              | 35 × 30            | 2050                 | 1.08                       | LLS2G331MELC |
| 390          | 30 × 40            | 2260                 | 1.18                       | LLS2G391MELB |
|              | 35 × 35            | 2280                 | 1.18                       | LLS2G391MELC |
| 470          | 30 × 45            | 2510                 | 1.30                       | LLS2G471MELB |
|              | 35 × 35            | 2510                 | 1.30                       | LLS2G471MELC |
| 560          | 30 × 50            | 2850                 | 1.41                       | LLS2G561MELB |
|              | 35 × 40            | 2850                 | 1.41                       | LLS2G561MELC |
| 680          | 35 × 50            | 3100                 | 1.56                       | LLS2G681MELC |

| 450V (2W)    |                    |                      |                            |              |
|--------------|--------------------|----------------------|----------------------------|--------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage<br>Current<br>(mA) | Code         |
| 56           | 20 × 25            | 610                  | 0.47                       | LLS2W560MELY |
| 68           | 20 × 30            | 710                  | 0.52                       | LLS2W680MELY |
|              | 22 × 25            | 710                  | 0.52                       | LLS2W680MELZ |
| 82           | 20 × 35            | 800                  | 0.57                       | LLS2W820MELY |
|              | 22 × 25            | 860                  | 0.57                       | LLS2W820MELZ |
| 100          | 20 × 35            | 880                  | 0.63                       | LLS2W101MELY |
|              | 22 × 30            | 950                  | 0.63                       | LLS2W101MELZ |
|              | 25 × 25            | 970                  | 0.63                       | LLS2W101MELA |
| 120          | 20 × 40            | 990                  | 0.69                       | LLS2W121MELY |
|              | 22 × 35            | 1070                 | 0.69                       | LLS2W121MELZ |
|              | 25 × 30            | 1090                 | 0.69                       | LLS2W121MELA |
|              | 30 × 25            | 1120                 | 0.69                       | LLS2W121MELB |
| 150          | 22 × 40            | 1180                 | 0.77                       | LLS2W151MELZ |
|              | 25 × 30            | 1250                 | 0.77                       | LLS2W151MELA |
|              | 30 × 25            | 1290                 | 0.77                       | LLS2W151MELB |
| 180          | 22 × 45            | 1320                 | 0.85                       | LLS2W181MELZ |
|              | 25 × 35            | 1400                 | 0.85                       | LLS2W181MELA |
|              | 30 × 30            | 1450                 | 0.85                       | LLS2W181MELB |
| 220          | 25 × 40            | 1590                 | 0.94                       | LLS2W221MELA |
|              | 30 × 30            | 1640                 | 0.94                       | LLS2W221MELB |
|              | 35 × 25            | 1590                 | 0.94                       | LLS2W221MELC |
| 270          | 30 × 35            | 1890                 | 1.04                       | LLS2W271MELB |
|              | 35 × 30            | 1900                 | 1.04                       | LLS2W271MELC |
| 330          | 30 × 40            | 2120                 | 1.15                       | LLS2W331MELB |
|              | 35 × 35            | 2150                 | 1.15                       | LLS2W331MELC |
| 390          | 30 × 45            | 2350                 | 1.25                       | LLS2W391MELB |
|              | 35 × 40            | 2380                 | 1.25                       | LLS2W391MELC |
| 470          | 35 × 45            | 2680                 | 1.37                       | LLS2W471MELC |
| 560          | 35 × 50            | 2880                 | 1.50                       | LLS2W561MELC |

Rated ripple current (mA<sub>rms</sub>) at 85°C 120Hz

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)