

# ALUMINUM ELECTROLYTIC CAPACITORS



**LS** Snap-in Terminal Type, 85°C Standard series



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



## 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 Z/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 |           |      |      |            |      |      |            |      |      |      |      |      |      |
| 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)



| Case dia.code |      |
|---------------|------|
| φD            | Code |
| 20            | Y    |
| 22            | Z    |
| 25            | A    |
| 30            | B    |
| 35            | C    |

## Frequency coefficient of rated ripple current

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

Minimum order quantity : 50pcs.

● Dimension table in next page.

## ■Dimensions

| 16V (1C)  |                 |                   |                      |              |
|-----------|-----------------|-------------------|----------------------|--------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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 (mArms) at 85°C 120Hz

## ■Dimensions

| 63V (1J)  |                 |                   |                      |              |
|-----------|-----------------|-------------------|----------------------|--------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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 (mArms) at 85°C 120Hz

## ■Dimensions

| 160V (2C) |                 |                   |                      |              |
|-----------|-----------------|-------------------|----------------------|--------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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 |
|           | 22 × 35         | 2480              | 1.04                 | LLS2Z681MELZ |
| 680       | 25 × 30         | 2500              | 1.04                 | LLS2Z681MELA |
|           | 30 × 25         | 2460              | 1.04                 | LLS2Z681MELB |
|           | 22 × 40         | 2860              | 1.15                 | LLS2Z821MELZ |
| 820       | 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 |
|           | 30 × 45         | 4550              | 1.70                 | LLS2Z182MELB |
| 1800      | 35 × 35         | 4540              | 1.70                 | LLS2Z182MELC |
|           | 2200            | 35 × 40           | 4830                 | 1.88         |
| 2700      | 35 × 50         | 5300              | 2.09                 | LLS2Z272MELC |

| 200V (2D) |                 |                   |                      |              |
|-----------|-----------------|-------------------|----------------------|--------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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 |
| 820       | 25 × 45         | 3010              | 1.35                 | LLS2E821MELA |
|           | 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 |
|           | 30 × 45         | 3990              | 1.64                 | LLS2E122MELB |
| 1200      | 35 × 35         | 3840              | 1.64                 | LLS2E122MELC |
|           | 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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code         |
| 68        | 20 × 25         | 750               | 0.49                 | LLS2G680MELY |
|           | 20 × 30         | 820               | 0.54                 | LLS2G820MELY |
| 82        | 22 × 25         | 840               | 0.54                 | LLS2G820MELZ |
|           | 20 × 30         | 950               | 0.60                 | LLS2G101MELY |
| 100       | 22 × 25         | 950               | 0.60                 | LLS2G101MELZ |
|           | 20 × 35         | 1070              | 0.65                 | LLS2G121MELY |
| 120       | 22 × 30         | 1090              | 0.65                 | LLS2G121MELZ |
|           | 25 × 25         | 1130              | 0.65                 | LLS2G121MELA |
|           | 20 × 40         | 1220              | 0.73                 | LLS2G151MELY |
| 150       | 22 × 35         | 1240              | 0.73                 | LLS2G151MELZ |
|           | 25 × 30         | 1270              | 0.73                 | LLS2G151MELA |
|           | 22 × 40         | 1410              | 0.80                 | LLS2G181MELZ |
| 180       | 25 × 30         | 1440              | 0.80                 | LLS2G181MELA |
|           | 30 × 25         | 1520              | 0.80                 | LLS2G181MELB |
|           | 22 × 45         | 1580              | 0.88                 | LLS2G221MELZ |
| 220       | 25 × 35         | 1640              | 0.88                 | LLS2G221MELA |
|           | 30 × 30         | 1660              | 0.88                 | LLS2G221MELB |
|           | 25 × 40         | 1790              | 0.98                 | LLS2G271MELA |
| 270       | 30 × 30         | 1820              | 0.98                 | LLS2G271MELB |
|           | 25 × 45         | 2000              | 1.08                 | LLS2G331MELA |
|           | 30 × 35         | 2050              | 1.08                 | LLS2G331MELB |
| 330       | 35 × 30         | 2050              | 1.08                 | LLS2G331MELC |
|           | 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. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (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 «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.