

Radial Lead Type

OS-CON

Series : **SEPC**



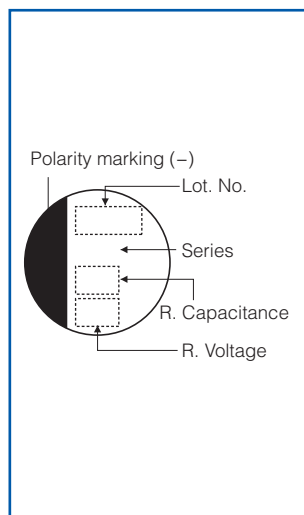
Features

- Super low ESR (5 mΩ to 24 mΩ)
- Large capacitance (2700 μF max.)
- RoHS compliance, Halogen free

Specifications

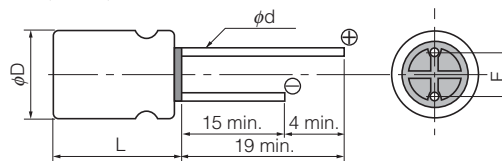
| Size code | B9 | C55 | C6 | C9 | E7 | E9 | E12 | E13 | F13 |
|------------------------------|--------------------------------------------------|-----------------------------------------------------|------------|------------|-------------|-------------|------------|------------|-------------|
| Category temperature range | -55 °C to +105 °C | | | | | | | | |
| Rated voltage range (V.DC) | 2.5 | 6.3 | 2.5 to 16 | | 6.3 to 16 | 2.5 to 16 | 16 | 2.5 to 6.3 | 2.5 to 16 |
| Rated capacitance range (μF) | 100 to 560 | 220 | 100 to 560 | 100 to 820 | 150 to 1000 | 180 to 1000 | 180 to 270 | 470 to 820 | 470 to 2700 |
| Capacitance tolerance | ±20 % (120 Hz / + 20 °C) | | | | | | | | |
| Leakage current | Please see the attached characteristics list | | | | | | | | |
| Dissipation factor (tan δ) | Please see the attached characteristics list | | | | | | | | |
| Endurance | +105 °C, 5000 h, rated voltage applied | | | | | | | | |
| | Capacitance change | Within ±20 % of the initial value | | | | | | | |
| | tan δ | ≤ 150 % of the initial limit | | | | | | | |
| | DC leakage current | Within the initial limit | | | | | | | |
| Damp heat (Steady State) | +60 °C, 90 % to 95 %, 1000 h, No-applied voltage | | | | | | | | |
| | Capacitance change | Within ±20 % of the initial value | | | | | | | |
| | tan δ | ≤ 150 % of the initial limit | | | | | | | |
| | DC leakage current | Within the initial limit (after voltage processing) | | | | | | | |

Marking

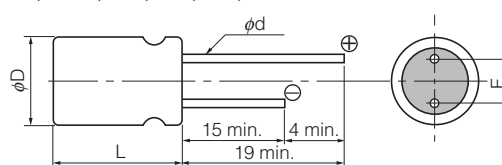


Dimensions (not to scale)

E12, E13, F13 Size



B9, C55, C6, C9, E7, E9 Size



B9, C55, C6, C9, E7, E9 size flat rubber is used.

* Externals of figure are the reference.

| Size code | Unit : mm | | | |
|-----------|-----------|--------|-------|---------|
| | φD±0.5 | L max. | F±0.5 | φd±0.05 |
| B9 | 5.0 | 9.0 | 2.0 | 0.6 |
| C55 | 6.3 | 5.5 | 2.5 | 0.45 |
| C6 | 6.3 | 6.0 | 2.5 | 0.45 *1 |
| C9 | 6.3 | 9.0 | 2.5 | 0.6 |
| E7 | 8.0 | 7.0 | 3.5 | 0.6 *2 |
| E9 | 8.0 | 9.0 | 3.5 | 0.6 |
| E12 | 8.0 | 12.0 | 3.5 | 0.6 |
| E13 | 8.0 | 13.0 | 3.5 | 0.6 |
| F13 | 10.0 | 13.0 | 5.0 | 0.6 |

*1 2SEPC390M, 2SEPC560M : 0.5±0.05

*2 16SEPC150MD, 10SEPC270M : 0.45±0.05

Characteristics list

| Series | Rated voltage (V.DC) | Rated capacitance (μF) | Case size (mm) | | Size code | Specifications | | | | Part number |
|--------|----------------------|------------------------|----------------|------|-----------|------------------------------------------|-----------------------------|---------------------|-----------------------|-------------|
| | | | φD | L | | Ripple* ¹ current (mA r.m.s.) | ESR* ² (mΩ max.) | tan δ* ³ | LC* ⁴ (μA) | |
| SEPC | 2.5 | 100 | 5.0 | 9.0 | B9 | 4180 | 7 | 0.10 | 500 | 2SEPC100MZ |
| | | 330 | 5.0 | 9.0 | | 4180 | 7 | 0.10 | 500 | 2SEPC330MZ |
| | | 390 | 6.3 | 6.0 | C6 | 3900 | 10 | 0.12 | 500 | 2SEPC390M |
| | | 470 | 5.0 | 9.0 | B9 | 4180 | 7 | 0.10 | 500 | 2SEPC470MZ |
| | | 560 | 5.0 | 9.0 | | 4180 | 7 | 0.10 | 500 | 2SEPC560MZ |
| | | | 6.3 | 6.0 | C6 | 3900 | 10 | 0.12 | 500 | 2SEPC560M |
| | | | 6.3 | 9.0 | C9 | 5600 | 7 | 0.10 | 500 | 2SEPC560MW |
| | | 820 | 8.0 | 9.0 | E9 | 4700 | 8 | 0.10 | 280 | 2SEPC560MX |
| | | | 6.3 | 9.0 | C9 | 5600 | 7 | 0.10 | 500 | 2SEPC820MW |
| | | | 8.0 | 7.0 | E7 | 5300 | 8 | 0.10 | 500 | 2SEPC820MD |
| | | | 8.0 | 9.0 | E9 | 6100 | 7 | 0.10 | 500 | 2SEPC820MX |
| | | | 8.0 | 9.0 | | 7200 | 5 | 0.10 | 500 | 2SEPC820MY |
| | | 8.0 | 13.0 | E13 | 6100 | 7 | 0.10 | 500 | 2R5SEPC820M | |
| | | 1000 | 8.0 | 9.0 | E9 | 6100 | 7 | 0.10 | 500 | 2SEPC1000MX |
| | 2700 | 10.0 | 13.0 | F13 | 5560 | 10 | 0.10 | 1350 | 2SEPC2700M | |
| | 4.0 | 560 | 6.3 | 9.0 | C9 | 5600 | 7 | 0.10 | 500 | 4SEPC560MW |
| | | | 8.0 | 9.0 | E9 | 6100 | 7 | 0.10 | 500 | 4SEPC560MX |
| | | | 8.0 | 13.0 | E13 | 6100 | 7 | 0.10 | 500 | 4SEPC560M |
| | | 680 | 8.0 | 13.0 | | 6100 | 7 | 0.10 | 544 | 4SEPC680M |
| | | 820 | 10.0 | 13.0 | F13 | 6640 | 7 | 0.10 | 656 | 4SEPC820M |
| | 6.3 | 220 | 6.3 | 5.5 | C55 | 2980 | 18 | 0.12 | 280 | 6SEPC220M |
| | | 470 | 6.3 | 9.0 | C9 | 5600 | 7 | 0.10 | 592 | 6SEPC470MW |
| | | | 8.0 | 9.0 | E9 | 5700 | 8 | 0.10 | 592 | 6SEPC470MX |
| | | | 8.0 | 13.0 | E13 | 5700 | 8 | 0.10 | 592 | 6SEPC470M |
| | | 560 | 6.3 | 9.0 | C9 | 5600 | 7 | 0.10 | 705 | 6SEPC560MW |
| | | | 8.0 | 9.0 | E9 | 6100 | 7 | 0.10 | 705 | 6SEPC560MX |
| | | 680 | 10.0 | 13.0 | F13 | 6640 | 7 | 0.10 | 857 | 6SEPC680M |
| | | 1000 | 8.0 | 7.0 | E7 | 3530 | 18 | 0.10 | 1260 | 6SEPC1000MD |
| | 1500 | 10.0 | 13.0 | F13 | 5560 | 10 | 0.10 | 1890 | 6SEPC1500M | |
| | 10 | 270 | 8.0 | 7.0 | E7 | 3220 | 22 | 0.12 | 500 | 10SEPC270MD |
| | 16 | 100 | 6.3 | 6.0 | C6 | 2490 | 24 | 0.10 | 320 | 16SEPC100M |
| | | | 6.3 | 9.0 | C9 | 4680 | 10 | 0.10 | 500 | 16SEPC100MW |
| | | 150 | 8.0 | 7.0 | E7 | 3220 | 22 | 0.12 | 500 | 16SEPC150MD |
| | | 180 | 8.0 | 9.0 | E9 | 5000 | 10 | 0.10 | 576 | 16SEPC180MX |
| | | | 8.0 | 12.0 | E12 | 4360 | 16 | 0.10 | 576 | 16SEPC180M |
| | | 220 | 8.0 | 7.0 | E7 | 4150 | 13 | 0.10 | 500 | 16SEPC220MD |
| 270 | | 8.0 | 9.0 | E9 | 5000 | 10 | 0.10 | 864 | 16SEPC270MX | |
| | | 8.0 | 12.0 | E12 | 5000 | 11 | 0.10 | 864 | 16SEPC270M | |
| 470 | 10.0 | 13.0 | F13 | 6100 | 10 | 0.10 | 1504 | 16SEPC470M | | |

*1 Ripple current (100 kHz/ +105 °C), *2 ESR (100 kHz to 300 kHz/+20 °C) *3 tan δ (120 Hz/+20 °C) *4 After 2 minutes
 ◆ Please refer to each page in this catalog for "Flow conditions" and "Taping specifications".

Frequency correction factor for ripple current

| Frequency | 120 Hz ≤ f < 1 kHz | 1 kHz ≤ f < 10 kHz | 10 kHz ≤ f < 100 kHz | 100 kHz ≤ f < 500 kHz |
|-------------|--------------------|--------------------|----------------------|-----------------------|
| Coefficient | 0.05 | 0.3 | 0.7 | 1 |