



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Radial Lead Type

OS-CON



Series : **SEF**

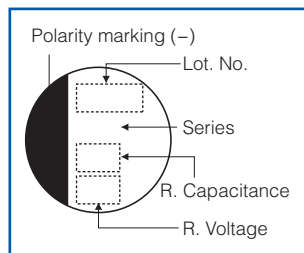
Features

- High voltage (35 V.DC max.)
- Large capacitance (1000 μ F max.)
- RoHS compliance, Halogen free

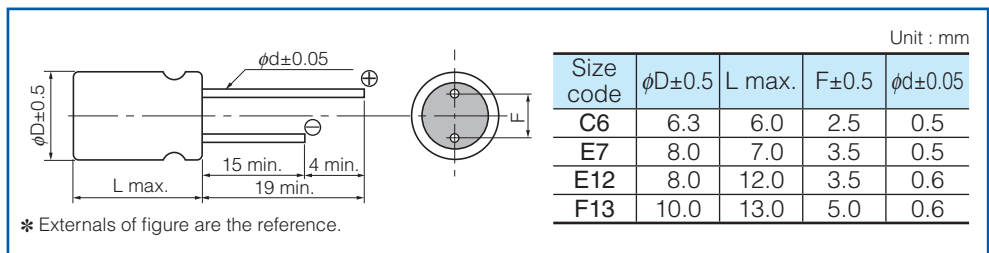
Specifications

| Size code | C6 | E7 | E12 | F13 |
|------------------------------------|--|---|---------------------------|-----------------------------|
| Category temperature range | -55 °C to +125 °C | | | |
| Rated voltage range | 16 V.DC to 35 V.DC | | | |
| Rated capacitance range | 22 μ F to 180 μ F | 39 μ F to 270 μ F | 82 μ F to 560 μ F | 120 μ F to 1000 μ F |
| Capacitance tolerance | \pm 20 % (120 Hz / + 20 °C) | | | |
| Leakage current | Please see the attached characteristics list | | | |
| Dissipation factor (tan δ) | Please see the attached characteristics list | | | |
| Endurance | +125 °C, 1000 h, rated voltage applied | | | |
| | Capacitance change | Within \pm 20 % of the initial value | | |
| | tan δ | \leq 200 % 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 \pm 20 % of the initial value | | |
| | tan δ | \leq 150 % of the initial limit | | |
| | DC leakage current | Within the initial limit (after voltage processing) | | |

Marking



Dimensions (not to scale)



Characteristics list

| Series | Rated voltage (V.DC) | Rated capacitance (μ F) | Case size (mm) | | | Specifications | | | | | Part number |
|--------|----------------------|------------------------------|----------------|------|-----------|---|---|-------------------------------------|-----------------------------|-----------------------------|-------------|
| | | | ϕ D | L | Size code | Ripple current* ¹ (mAr.m.s.) | Allowable* ¹ ripple current (mAr.m.s.) | ESR* ² (m Ω max.) | tan δ * ³ | LC* ⁴ (μ A) | |
| SEF | 16 | 180 | 6.3 | 6.0 | C6 | 1040 | 3300 | 22 | 0.12 | 576 | 16SEF180M |
| | | 270 | 8.0 | 7.0 | E7 | 1040 | 3300 | 22 | 0.12 | 864 | 16SEF270M |
| | | 560 | 8.0 | 12.0 | E12 | 1560 | 4950 | 14 | 0.12 | 1792 | 16SEF560M |
| | | 1000 | 10.0 | 13.0 | F13 | 1700 | 5400 | 12 | 0.12 | 3200 | 16SEF1000M |
| | 20 | 120 | 6.3 | 6.0 | C6 | 1010 | 3200 | 25 | 0.12 | 480 | 20SEF120M |
| | | 180 | 8.0 | 7.0 | E7 | 1010 | 3200 | 25 | 0.12 | 720 | 20SEF180M |
| | | 390 | 8.0 | 12.0 | E12 | 1560 | 4950 | 14 | 0.12 | 1560 | 20SEF390M |
| | | 560 | 10.0 | 13.0 | F13 | 1700 | 5400 | 12 | 0.12 | 2240 | 20SEF560M |
| | 25 | 56 | 6.3 | 6.0 | C6 | 880 | 2800 | 30 | 0.12 | 280 | 25SEF56M |
| | | 82 | 8.0 | 7.0 | E7 | 940 | 3000 | 28 | 0.12 | 410 | 25SEF82M |
| | | 180 | 8.0 | 12.0 | E12 | 1470 | 4650 | 16 | 0.12 | 900 | 25SEF180M |
| | | 330 | 10.0 | 13.0 | F13 | 1580 | 5000 | 14 | 0.12 | 1650 | 25SEF330M |
| | 35 | 22 | 6.3 | 6.0 | C6 | 820 | 2600 | 35 | 0.12 | 154 | 35SEF22M |
| | | 39 | 8.0 | 7.0 | E7 | 880 | 2800 | 30 | 0.12 | 273 | 35SEF39M |
| | | 82 | 8.0 | 12.0 | E12 | 1260 | 4000 | 20 | 0.12 | 574 | 35SEF82M |
| | | 120 | 10.0 | 13.0 | F13 | 1390 | 4400 | 18 | 0.12 | 840 | 35SEF120M |

*¹ Ripple current (100 kHz/ +105 °C < Tx \leq +125 °C) / Allowable ripple current (100 kHz/ Tx \leq +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 \leq f < 1 kHz | 1 kHz \leq f < 10 kHz | 10 kHz \leq f < 100 kHz | 100 kHz \leq f < 500 kHz |
|-------------|-------------------------|-------------------------|---------------------------|----------------------------|
| Coefficient | 0.05 | 0.3 | 0.7 | 1 |

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.

Should a safety concern arise regarding this product, please be sure to contact us immediately.