Panasonic Conductive Polymer Aluminum Solid Capacitors

Radial Lead Type

OS-CON

Series: SEK



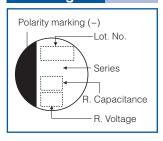


Features

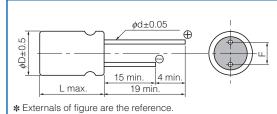
- High voltage (50 V.DC max.)
- RoHS compliance, Halogen free
- 125 °C 1000 h

| Specifications | | | | | | | |
|--|--|--|------------------------|------------------|--|--|--|
| Size code | C6 | E7 | E12 | F13 | | | |
| Category temperature range | -55 °C to +125 °C | | | | | | |
| Rated voltage range | 25 V.DC to 50 V.DC | | | | | | |
| Rated capacitance range 22 µF to 82 µF | | 33 μF to 120 μF | 68 μF to 270 μF | 120 μF to 470 μF | | | |
| 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 | | | | | | |
| | +125 °C, 1000 h, rated voltage applied | | | | | | |
| Endurance | Capacitance change | change Within ±20 % of the initial value | | | | | |
| | tan δ | | | | | | |
| | DC leakage current Within the initial limit | | | | | | |
| | +60 °C, 90 % to 95 %, 1000 h, No-applied voltage | | | | | | |
| Damp heat | Capacitance change Within ±20 % of the initial value | | | | | | |
| (Steady State) | tan δ | ≤ 150 % of the initial limit | | | | | |
| | DC leakage current | Within the initial limit (aft | er voltage processing) | | | | |

Marking



Dimensions (not to scale)



| | | | | Unit : mm |
|--------------|--------|--------|-------|-----------|
| Size code | φD±0.5 | L max. | F±0.5 | φd±0.05 |
| C6 | 6.3 | 6.0 | 2.5 | 0.5 |
| E7 | 8.0 | 7.0 | 3.5 | 0.5 |
| E12 | 8.0 | 12.0 | 3.5 | 0.6 |
| F13 | 10.0 | 13.0 | 5.0 | 0.6 |
| | | | | |

Characteristics list

| | Rated voltage (V.DC) | Rated | Case size (mm) | | | Specifications | | | | | |
|--------------|----------------------------|-------|----------------|------|--------------|-----------------------------------|--|-------------------------|---------|--------------------------|-------------|
| Series | | | φD | L | Size code | Ripple*1 current (mAr.m.s.) | Allowable *1 ripple current (mAr.m.s.) | ESR*2 (m Ω max.) | tan δ*3 | LC* ⁴ (μΑ) | Part number |
| 25 SEK 35 | | 82 | 6.3 | 6.0 | C6 | 960 | 3060 | 25 | 0.12 | 410 | 25SEK82M |
| | 25 | 120 | 8.0 | 7.0 | E7 | 1010 | 3200 | 24 | 0.12 | 600 | 25SEK120M |
| | 25 | 270 | 8.0 | 12.0 | E12 | 1470 | 4650 | 16 | 0.12 | 1350 | 25SEK270M |
| | | 470 | 10.0 | 13.0 | F13 | 1590 | 5000 | 14 | 0.12 | 2350 | 25SEK470M |
| | | 47 | 6.3 | 6.0 | C6 | 930 | 2950 | 27 | 0.12 | 329 | 35SEK47M |
| | O.F. | 82 | 8.0 | 7.0 | E7 | 960 | 3060 | 25 | 0.12 | 574 | 35SEK82M |
| | 180 | 8.0 | 12.0 | E12 | 1260 | 4000 | 20 | 0.12 | 1260 | 35SEK180M | |
| | | 330 | 10.0 | 13.0 | F13 | 1390 | 4400 | 18 | 0.12 | 2310 | 35SEK330M |
| | 50 | 22 | 6.3 | 6.0 | C6 | 820 | 2600 | 35 | 0.12 | 220 | 50SEK22M |
| | | 33 | 8.0 | 7.0 | E7 | 850 | 2700 | 35 | 0.12 | 330 | 50SEK33M |
| | | 68 | 8.0 | 12.0 | E12 | 1200 | 3800 | 25 | 0.12 | 680 | 50SEK68M |
| | | 120 | 10.0 | 13.0 | F13 | 1350 | 4300 | 20 | 0.12 | 1200 | 50SEK120M |

- *1 Ripple current (100 kHz/ +105 °C < Tx ≤ +125 °C) /Allowable ripple current (100 kHz/ Tx ≤ +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 catarog 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 | | | | |