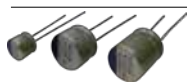


| |
|---|
| OS-CON Line-up |
| Guidelines and precautions |
| Series system diagram |
| Image of case size |
| Products list |
| Packing specifications (SMD type) |
| Packing specifications (Radial lead type) |
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| SXV |
| SVPG |
| SVPF |
| SVPE |
| SVPS |
| SVPD |
| SVPC |
| SVPB |
| SVPA |
| SVQP |
| SVP |
| SXE |
| SEPF |
| SEPC |
| SEQP |
| SEP |
| Catalog Deletion and EOL series |

Radial lead type

SEQP Series



RoHS directive/Halogen-free compliant
 High voltage(32V)
 Endurance: 125°C 1,000h, 105°C 5,000h

Specifications

| Items | Condition | Specifications | | | | | |
|--|---|--|---|--------------|----|----|----|
| | | 4.0 | 6.3 | 10 | 16 | 20 | 32 |
| Rated voltage (V) | — | 4.0 | 6.3 | 10 | 16 | 20 | 32 |
| Surge voltage (V) | Room temperature | 5.2 | 8.4 | 12 | 18 | 23 | 37 |
| Category temperature range(°C) | — | -55 to +125 | | | | | |
| Capacitance tolerance (%) | 120Hz/20°C | M : ±20 | | | | | |
| Dissipation Factor (DF) | 120Hz/20°C | Please see the attached characteristics list | | | | | |
| Leakage current*1 | Rated voltage applied, after 2 minutes | Please see the attached characteristics list | | | | | |
| Equivalent series resistance (ESR) | 100kHz to 300kHz/20°C | Please see the attached characteristics list | | | | | |
| Characteristics of impedance ratio at high temp. and low temp. | Based the value at 100kHz, +20°C | -55°C | Z/Z _{20°C} | 0.75 to 1.25 | | | |
| | | +125°C | Z/Z _{20°C} | 0.75 to 1.25 | | | |
| Endurance | 125°C, 1,000h, 105°C, 5,000h, Rated voltage applied | ΔC/C | Within ±20% of the initial value | | | | |
| | | DF | Within 2 times of the initial limit | | | | |
| | | ESR | Within 2 times of the initial limit | | | | |
| | | LC | Within the initial limit | | | | |
| Damp heat(Steady state) | 60°C, 90 to 95%RH, 1,000h, No-applied voltage | ΔC/C | Within ±20% of the initial value | | | | |
| | | DF | Within 1.5 times of the initial limit | | | | |
| | | ESR | Within 1.5 times of the initial limit | | | | |
| | | LC | Within the initial limit (after voltage processing) | | | | |
| Resistance to soldering heat*2 | Flow method (260±5°C X 10s) | ΔC/C | Within ±5% of the initial value | | | | |
| | | DF | Within the initial limit | | | | |
| | | ESR | Within the initial limit | | | | |
| | | LC | Within the initial limit (after voltage processing) | | | | |

*1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 125°C.

*2 Please refer to page 25 for flow soldering conditions.

Marking and dimensions

Polarity marking (Cathode)

Case No.

Series (SEQP)

Rated capacitance

Rated voltage

| Size code | φD ±0.5 | L max | F | φd ±0.05 |
|-----------|---------|-------|---------|----------|
| C6 | 6.3 | 6.0 | 2.5±0.5 | 0.45 |
| E7 | 8.0 | 7.0 | 3.5±0.5 | 0.45 |
| F8 | 10.0 | 8.0 | 5.0±0.5 | 0.50 |
| E12 | 8.0 | 12.0 | 3.5±0.5 | 0.60 |
| F13 | 10.0 | 13.0 | 5.0±0.5 | 0.60 |

(unit : mm)

Size list

RV : Rated voltage

| μF \ RV | 4.0 | 6.3 | 10 | 16 | 20 | 32 |
|---------|-----|-----|-----|-----|-----|-----|
| 6.8 | | | | | | E7 |
| 15 | | | | | | F8 |
| 18 | | | | | | E12 |
| 22 | | | | | C6 | |
| 39 | | | | C6 | | |
| 47 | | | | | E7 | |
| 56 | | | C6 | | | |
| 68 | | | | | F8 | |
| 82 | | C6 | | E7 | | |
| 100 | | | | | E12 | |
| 120 | | | E7 | | | |
| 150 | C6 | E7 | | F8 | F13 | |
| 180 | | | | E12 | | |
| 270 | | | F8 | | | |
| 330 | E7 | F8 | E12 | F13 | | |
| 470 | | E12 | | | | |
| 560 | E12 | | F13 | | | |
| 680 | F8 | | | | | |
| 820 | | F13 | | | | |
| 1,200 | F13 | | | | | |

SEQP series characteristics list

| Size code | Part number | Rated voltage (V) | Rated capacitance (μ F) | ESR($m\Omega$) (max) 100kHz to 300kHz/20°C | Rated ripple current | Allowable ripple current | DF (% max) | Leakage current (μ A) (max) After 2 minutes |
|-----------|-------------|-------------------|------------------------------|---|-------------------------------|--------------------------|------------|---|
| | | | | | 100kHz (mA _{rms}) | | | |
| | | | | | 105°C<T _x ≤125°C※1 | T _x ≤105°C※1 | | |
| C6 | 20SEQP22M | 20 | 22 | 60 | 458 | 1450 | 10 | 220 |
| | 16SEQP39M | 16 | 39 | 50 | 512 | 1620 | 10 | 312 |
| | 10SEQP56M | 10 | 56 | 45 | 537 | 1700 | 12 | 280 |
| | 6SEQP82M | 6.3 | 82 | 45 | 537 | 1700 | 12 | 258 |
| | 4SEQP150M | 4.0 | 150 | 40 | 572 | 1810 | 12 | 300 |
| E7 | 32SEQP6R8M | 32 | 6.8 | 100 | 440 | 1400 | 10 | 44 |
| | 20SEQP47M | 20 | 47 | 45 | 598 | 1890 | 12 | 470 |
| | 16SEQP82M | 16 | 82 | 40 | 670 | 2120 | 12 | 656 |
| | 10SEQP120M | 10 | 120 | 35 | 810 | 2560 | 12 | 600 |
| | 6SEQP150M | 6.3 | 150 | 35 | 810 | 2560 | 12 | 472 |
| | 4SEQP330M | 4.0 | 330 | 35 | 810 | 2560 | 12 | 660 |
| F8 | 32SEQP15M | 32 | 15 | 80 | 560 | 1800 | 10 | 96 |
| | 20SEQP68M | 20 | 68 | 40 | 759 | 2400 | 12 | 272 |
| | 16SEQP150M | 16 | 150 | 30 | 955 | 3020 | 12 | 480 |
| | 10SEQP270M | 10 | 270 | 25 | 1170 | 3700 | 12 | 540 |
| | 6SEQP330M | 6.3 | 330 | 25 | 1170 | 3700 | 12 | 416 |
| | 4SEQP680M | 4.0 | 680 | 25 | 1170 | 3700 | 12 | 544 |
| E12 | 32SEQP18M | 32 | 18 | 50 | 790 | 2500 | 12 | 115 |
| | 20SEQP100M | 20 | 100 | 24 | 1050 | 3320 | 15 | 400 |
| | 16SEQP180M | 16 | 180 | 20 | 1151 | 3640 | 15 | 576 |
| | 10SEQP330M | 10 | 330 | 17 | 1250 | 3950 | 15 | 660 |
| | 6SEQP470M | 6.3 | 470 | 15 | 1332 | 4210 | 15 | 592 |
| | 4SEQP560M | 4.0 | 560 | 13 | 1430 | 4520 | 15 | 448 |
| F13 | 20SEQP150M | 20 | 150 | 20 | 1367 | 4320 | 15 | 600 |
| | 16SEQP330M | 16 | 330 | 16 | 1493 | 4720 | 15 | 792 |
| | 10SEQP560M | 10 | 560 | 13 | 1655 | 5230 | 15 | 840 |
| | 6SEQP820M | 6.3 | 820 | 12 | 1721 | 5440 | 15 | 775 |
| | 4SEQP1200M | 4.0 | 1200 | 12 | 1721 | 5440 | 18 | 960 |

※1 T_x : Ambient temperature

Frequency coefficient for ripple current

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

Mouser Electronics

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[32SEQP15M](#) [6SEQP330M](#) [10SEQP270M+T](#)



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