

Surface Mount Type



Series : SVPE

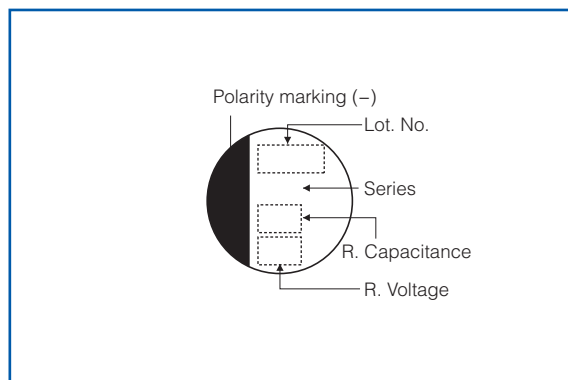
Features

- Super low ESR (8 mΩ to 18 mΩ)
- Large capacitance (1200 μF max.)
- RoHS compliance, Halogen free

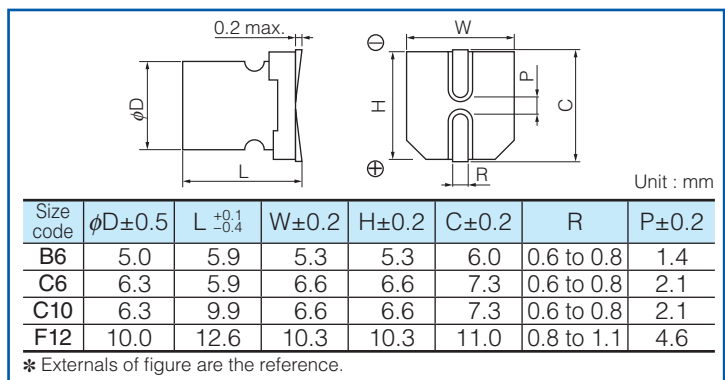
Specifications

| Size code | B6 | C6 | C10 | F12 |
|----------------------------|--|---|-------------------|---------|
| Category temperature range | -55 °C to +105 °C | | | |
| Rated voltage range | 2.5 V.DC to 6.3 V.DC | 2.5 V.DC to 10 V.DC | 2 V.DC to 16 V.DC | 16 V.DC |
| Rated capacitance range | 150 μF to 390 μF | 220 μF to 390 μF | 180 μF to 1200 μF | 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 | | | |
| Endurance | +105 °C, 2000 h, rated voltage applied | | | |
| | Capacitance change | Within ±20 % of the initial value | | |
| | tan δ | ≤ 150 % of 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)



Characteristics list

| Series | Rated voltage (V.DC) | Rated capacitance (μF) | Case size (mm) | | Size code | Specifications | | | | | Standard (Reel size : ϕ380) | | |
|--------|----------------------|------------------------|----------------|------|-----------|----------------------|-------------------------|-------------------------|--------------|------------|-----------------------------|--------------------------|-----------|
| | | | ϕD | L | | Ripple *1 (mAr.m.s.) | ESR | | tan δ *2 | LC *3 (μA) | Part number | Min. Packaging Qty (pcs) | |
| | | | | | | | 100 kHz/20 °C (mΩ max.) | 300 kHz/20 °C (mΩ max.) | | | | | |
| SVPE | 2 | 1200 | 6.3 | 9.9 | C10 | 5230 | 8 | 8 | 0.12 | 500 | 2SVPE1200M | 500 | |
| | | | | | | 2.5 | 270 | 5.0 | 5.9 | B6 | 3860 | 10 | 9 |
| | 330 | 3150 | 15 | 13 | 0.12 | | | | | | 500 | 2R5SVPE330M | 1500 |
| | | 390 | 3860 | 10 | 9 | | 0.12 | 500 | 2R5SVPE330MY | 1500 | | | |
| | 390 | | 3860 | 10 | 9 | | 0.12 | 700 | 2R5SVPE390MX | 1500 | | | |
| | | 6.3 | 150 | 5.0 | 5.9 | C6 | 3900 | 10 | 9 | 0.12 | 500 | 2R5SVPE390M | 1000 |
| | 180 | | | | | | 5.0 | 5.9 | B6 | 3520 | 12 | 10 | 0.12 |
| | | | 220 | 3150 | 15 | 13 | | | | 0.12 | 500 | 6SVPE180M | 1500 |
| | 220 | | | 3150 | 15 | 13 | 0.12 | 500 | 6SVPE220MW | 1500 | | | |
| | | | 10 | 220 | 6.3 | 5.9 | C6 | 3900 | 10 | 9 | 0.12 | 500 | 6SVPE220M |
| | 2700 | | | | | | | 20 | 18 | 0.12 | 500 | 10SVPE220M | 1000 |
| | 16 | 180 | 6.3 | 9.9 | C10 | 4460 | 11 | 10 | 0.12 | 576 | 16SVPE180M | 500 | |
| | | | | | | 470 | 10.0 | 12.6 | F12 | 6100 | 10 | 9 | 0.12 |

*1 Ripple current (100 kHz/ +105 °C), *2 tan δ (120 Hz/+20 °C) *3 After 2 minutes
 ♦ Please refer to each page in this catalog for "Reflow 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 |

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