

Surface Mount Type



Series : SVQP

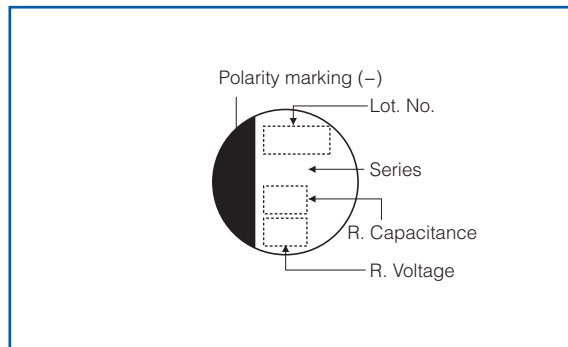
Features

- 125 °C 1000 h
- RoHS compliance, Halogen free

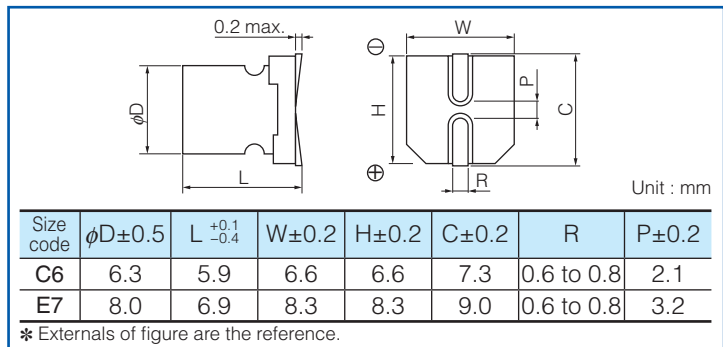
Specifications

| Size code | C6 | E7 |
|----------------------------|--|---|
| Category temperature range | -55 °C to +125 °C | |
| Rated voltage range | 4 V.DC to 20 V.DC | 6.3 V.DC to 20 V.DC |
| Rated capacitance range | 22 μF to 150 μF | 47 μF to 220 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 | +125 °C, 1000 h, rated voltage applied | |
| | Capacitance change | Within ±20 % of the initial value |
| | tan δ | ≤ 200 % 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 current* ¹ (mAr.m.s.) | Allowable* ¹ ripple current (mAr.m.s.) | ESR* ² (mΩ max.) | tan δ* ³ | LC* ⁴ (μA) | Part number | Min. Packaging Q'ty (pcs) | | | |
| SVQP | 4.0 | 150 | 6.3 | 5.9 | C6 | 572 | 1810 | 40 | 0.12 | 300 | 4SVQP150M | 1000 | | | |
| | | | | | | 538 | 1700 | 45 | 0.12 | 258 | 6SVQP82M | 1000 | | | |
| | 6.3 | 100 | 6.3 | 5.9 | | 572 | 1810 | 40 | 0.12 | 315 | 6SVQP100M | 1000 | | | |
| | | | | | | 810 | 2560 | 35 | 0.12 | 693 | 6SVQP220M | 1000 | | | |
| | 10 | 56 | 6.3 | 5.9 | C6 | 538 | 1700 | 45 | 0.12 | 280 | 10SVQP56M | 1000 | | | |
| | | | | | | 810 | 2560 | 35 | 0.12 | 600 | 10SVQP120M | 1000 | | | |
| | | | | | E7 | 120 | 8.0 | 6.9 | 810 | 2560 | 35 | 0.12 | 750 | 10SVQP150M | 1000 |
| | | | | | | | | | 810 | 2560 | 35 | 0.12 | 750 | 10SVQP150M | 1000 |
| | 16 | 39 | 6.3 | 5.9 | C6 | 512 | 1620 | 50 | 0.10 | 312 | 16SVQP39M | 1000 | | | |
| | | | | | | E7 | 82 | 8.0 | 6.9 | 670 | 2120 | 40 | 0.12 | 656 | 16SVQP82M |
| | 20 | 22 | 6.3 | 5.9 | C6 | | | | | 459 | 1450 | 60 | 0.10 | 220 | 20SVQP22M |
| | | | | | | E7 | 47 | 8.3 | 6.9 | 598 | 1890 | 45 | 0.12 | 470 | 20SVQP47M |

*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 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 |