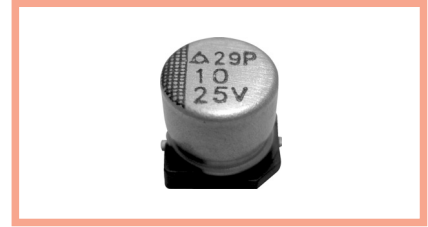
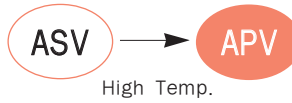


reAlcap™ APV Series

- Higher heat resistance (125°C).
- High Ripple Current.
- Endurance 125°C, 2,000hrs.
- AEC-Q200 compliant : Please contact us for more details, test data, information.

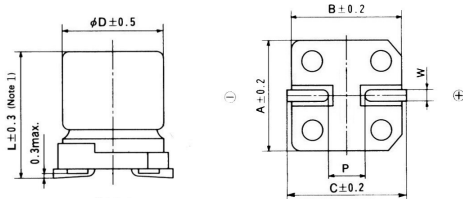


SPECIFICATIONS

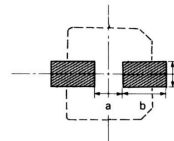
| Item | Characteristics |
|---|--|
| Category temperature range | -55 to +125°C |
| Rated voltage range | 10 to 25V _{DC} |
| Surge voltage | Rated Voltage(WV) 10 16 25 |
| | Surge Voltage(SV) 11.5 18.4 29 |
| Capacitance tolerance | ±20%(M) (at 20°C, 120Hz) |
| Tangent of loss angle | Shall not exceed the value in Ratings of APV series. (at 20°C, 120Hz) |
| Leakage Current ※ 1 | Shall not exceed the value in Ratings of APV series. (at 20°C, 2minutes) |
| ESR | Shall not exceed the value in Ratings of APV series. (at 20°C, 100kHz) |
| Impedance Ratio (Characteristics at low temp.) | Impedance Ratio |
| | Z(-25°C)/Z(+20°C) ≤ 1.15 |
| | Z(-55°C)/Z(+20°C) ≤ 1.25 (at 100kHz) |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 125°C. Capacitance change ≦ ±20% of the initial value Tan δ ≦ 200% of the initial specified value ESR ≦ 200% of the initial specified value Leakage current ≦ The initial specified value |
| Bias Humidity | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 60°C, 90~95%RH for 500 hours. Capacitance change ≦ ±20% of the initial value Tan δ ≦ 200% of the initial specified value ESR ≦ 200% of the initial specified value Leakage current ≦ The initial specified value |

※ 1. If any doubt arises, remeasure the leakage current after following voltage treatment.(Voltage treatment:Applying rated voltage for 120minutes at 125°C)
 ※ 2. Reflow Conditions : Refer to 37 page

DIMENSIONS

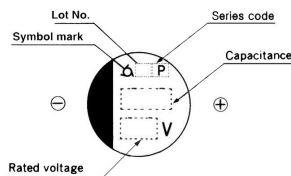


Recommended solder land on PC board



■ : Solder land on PC board

MARKING



Note 1 : L±0.5 for 8×11.5(H12)

Unit(mm)

| Case code | ∅ D | L | A | B | C | W | P | a | b | c |
|-----------|-----|------|-----|-----|-----|---------|-----|-----|-----|-----|
| F60 | 6.3 | 5.7 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 1.9 | 1.9 | 3.5 | 1.6 |
| H70 | 8.0 | 6.7 | 8.3 | 8.3 | 9.0 | 0.5-0.8 | 3.1 | 3.1 | 4.2 | 1.6 |
| H12 | 8.0 | 11.5 | 8.3 | 8.3 | 9.0 | 0.7-1.1 | 3.1 | 3.1 | 4.2 | 2.2 |

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

| Freq.(Hz) | 120 ≤ f < 1k | 1k ≤ f < 10k | 10k ≤ f < 100k | 100k ≤ f < 500k |
|-----------|--------------|--------------|----------------|-----------------|
| Factor | 0.05 | 0.3 | 0.7 | 1 |



RATINGS OF APV Series

| Case Code | Rated Voltage (V) | Rated Capacitance (μ F) | ESR(m Ω) (at 100kHz) | Rated Ripple Current (mA rms) at 100kHz | | Tangent of loss angle | Leakage Current (μ A) |
|-----------|-------------------|------------------------------|------------------------------|---|--------------------|-----------------------|----------------------------|
| | | | | 105°C < Temp. \leq 125°C | Temp. \leq 105°C | | |
| F60 | 10 | 56 | 45 | 538 | 1,700 | 0.10 | 112 |
| | 25 | 10 | 65 | 474 | 1,500 | 0.10 | 50 |
| H70 | 16 | 82 | 40 | 670 | 2,120 | 0.10 | 262 |
| | 25 | 22 | 48 | 580 | 1,835 | 0.10 | 110 |
| H12 | 16 | 150 | 27 | 994 | 3,140 | 0.10 | 480 |
| | 25 | 47 | 30 | 943 | 2,980 | 0.10 | 235 |