

Jumper chip (RPC series)

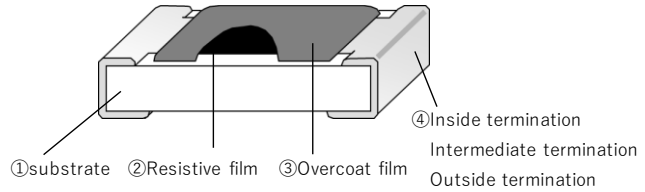
RPC01 (0201) RPC03 (0402) RPC05 (0603)
 RPC10 (0805) RPC18 (1206) RPC33 (1210)
 RPC50 (2010) RPC1S (2512) * () : Inch size

Not recommended : RPC18(1206) , RPC33(1210)
EOL (End of life) : RPC50(2010) , RPC1S(2512)

■ Features

- This product is Jumper chip (0Ω).
- RoHS qualified
- ELV qualified
- AEC-Q200 qualified

■ Structure

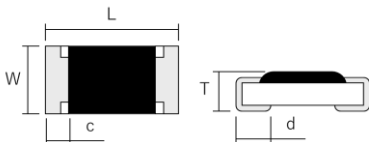


*This is only a schematic drawing of the structure.

■ Part No. Explanation (Example)

| | | | | | | | | | |
|----------------------|---|---|--|---|---|--------------------------|---|---|----------------------|
| R | P | C | 0 | 1 | T | 0 | R | 0 | |
| Product type | | | Size | | Packaging form | Nominal resistance value | | | Resistance tolerance |
| RPC : Jumper chip | | | 01:0201 03:0402 05:0603 10:0805 18:1206 33:1210 50:2010 1S:2512 | | T : 4mm pitch taping φ 180 reel (RPC01,03 is 2mm pitch) | 0R0 only | | | Blank |
| | | | | | | | | | |

■ Dimensions



* External dimensions are for reference only.

Overcoat film color : RPC01 is black
 RPC03~1S is green

| | L | W | T | c | d |
|-------|--------------------------------|-------------|--------------------------------|--------------------------------|--------------------------------|
| RPC01 | 0.60 ± 0.03 | 0.30 ± 0.03 | 0.23 ± 0.03 | 0.10 ± 0.05 | 0.15 ± 0.05 |
| RPC03 | 1.00 ± 0.05 | 0.50 ± 0.05 | 0.35 ± 0.05 | 0.20 ± 0.10 | 0.25 ^{+0.05} -0.10 |
| RPC05 | 1.60 ± 0.15 | 0.80 ± 0.15 | 0.45 ± 0.10 | 0.30 ± 0.15 | 0.20 ^{+0.20} -0.10 |
| RPC10 | 2.00 ± 0.15 | 1.25 ± 0.15 | 0.55 ^{+0.10} -0.05 | 0.35 ^{+0.20} -0.15 | 0.30 ^{+0.20} -0.10 |
| RPC18 | 3.10 ^{+0.20} -0.10 | 1.55 ± 0.15 | 0.55 ^{+0.10} -0.05 | 0.45 ± 0.20 | 0.35 ± 0.15 |
| RPC33 | 3.10 ^{+0.20} -0.10 | 2.60 ± 0.15 | 0.60 ± 0.10 | 0.45 ± 0.20 | 0.35 ± 0.15 |
| RPC50 | 5.00 ± 0.15 | 2.50 ± 0.15 | 0.60 ± 0.10 | 0.60 ± 0.20 | 0.60 ± 0.20 |
| RPC1S | 6.30 ± 0.20 | 3.20 ± 0.20 | 0.60 ± 0.10 | 0.60 ± 0.20 | 0.60 ± 0.20 |

Not recommended : RPC18(1206) , RPC33(1210) (Unit: mm)
EOL (End of life) : RPC50(2010) , RPC1S(2512)

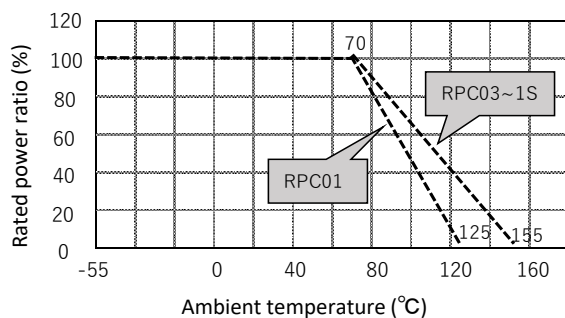
■ Ratings

| | Rated current | Maximum overload current | Conducted resistance value | Category temperature range |
|-------|---------------|--------------------------|----------------------------|----------------------------|
| RPC01 | 1A | 2A | 50mΩ or less | -55°C~+125°C |
| RPC03 | 1A | 2.5A | 50mΩ or less | -55°C~+155°C |
| RPC05 | 2A | 5A | 50mΩ or less | -55°C~+155°C |
| RPC10 | 2A | 5A | 50mΩ or less | -55°C~+155°C |
| RPC18 | 2A | 5A | 50mΩ or less | -55°C~+155°C |
| RPC33 | 2A | 5A | 50mΩ or less | -55°C~+155°C |
| RPC50 | 2A | 5A | 50mΩ or less | -55°C~+155°C |
| RPC1S | 2A | 5A | 50mΩ or less | -55°C~+155°C |

■ Specifications and test methods

| Item | Specifications | Test method |
|-----------------------------------|----------------------------|--|
| Resistance value | 50mΩ or less | JIS C5201-1 4.5 |
| Overload | 50mΩ or less | JIS C5201-1 8.1 Testing current = maximum overload current |
| Bend strength of the face plating | 50mΩ or less | JIS C5201-1 9.8 Bending distance : 3mm |
| Resistance to soldering heat | 50mΩ or less | JIS C5201-1 11.2 260 ± 5°C.10(sec.) |
| Solderability | Covered with more than 95% | JIS C5201-1 11.1 245 ± 3°C.2(sec.) |
| Rapid change of temperature | 50mΩ or less | JIS C5201-1 10.1 -55°C ⇄ +125°C,1000(times) |
| Loadlife in humidity | 50mΩ or less | 60 ± 2°C.90~95% R.H 1000h Testing current = maximum overload current |
| Endurance at 70°C | 50mΩ or less | JIS C5201-1 7.1 70 ± 2°C.1000h Testing current = maximum overload current |

■ Derating curve



* Rated power of the resistor is the maximum power which can be loaded continuously at the ambient temperature of 70 °C. For the ambient temperature above 70°C, please use according to the load derating curve (dotted line). Please note that the component surface temperature does not exceed operating temperature range.