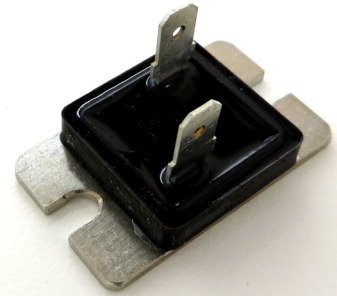


100W, 5kV

CHASSIS MOUNTING NON-INDUCTIVE
QUICK CONNECT HIGH POWER RESISTORS
RPL100F



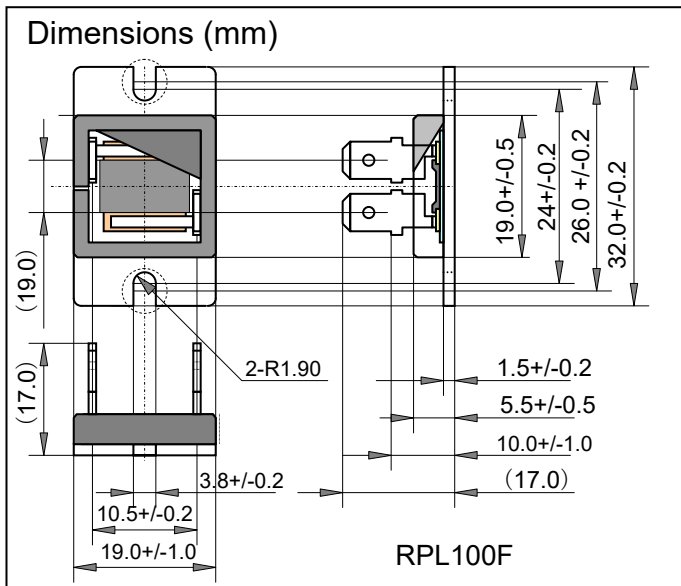
Features and Applications

Quick connect, flat type, 100W high power resistor. Attaching an air-cooled heat sink or water-cooling necessary. Rated power is 100W.

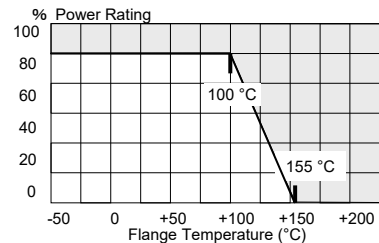
#187 quick connect tab terminals easy to assemble.

Higher density packing, vibration-proof, insulation withstand voltage and perfect heat dissipation possible.

Applications include harmonic filter, snubber resistors, surge protection, breeder resistor, dummy load, gate resistor, dumping resistor for automotive electronics, power supplies, high frequency amplifiers, etc.



Derating Curve

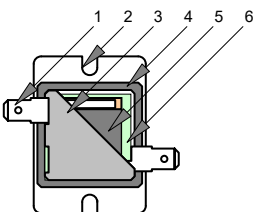


Performances

| | Performances | Conditions |
|-----------------------|---------------------------------|--|
| Rating Power | 100 W | At flange temperature -55 to +25 °C |
| Heat Resistance | 0.5°C/W | From resistor to flange |
| Resistance Range | 0.1 Ω to 51kΩ | Lowest 0.1 ohm is available |
| Nominal Resistance | E24+ | Modified E24, additionally, 2.0 and 5.0. |
| TCR | +/-100 ppm/K (A) | For -55 to +155 °C |
| Tolerance | +/-5% (J) | |
| Operation Temp. | -55 to +155 °C | At flange element surface |
| Max. Applied Voltage | $F = \sqrt{P \cdot R}$ or 1000V | |
| Withstanding Voltage | 5000 VAC | 60 seconds, leak current below 0.5mA |
| Load Life | ΔR +/- 1.0 % | Continuous power 1000hours. |
| Humidity | ΔR +/- 1.0 % | 60 °C, 90 to 95%RH, DC0.1W, 1000hours. |
| Temperature Cycle | ΔR +/- 1.0 % | -55 °C, 30 min., +155 °C 30min., 5 cycles. |
| Insulation Resistance | Over 1000 MΩ | Between terminals and flange. |
| Vibration | ΔR +/- 0.5 % | Note 2 |
| Flammability | UL94V-0 | For resistor body |
| Weight | 14 g | |

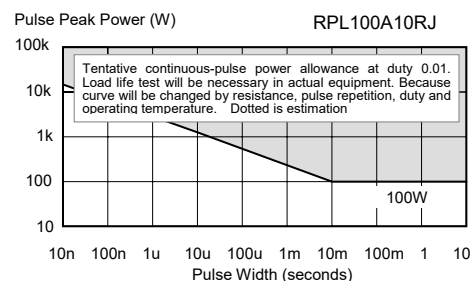
Note 1: Torque: Mounting 1.6Nm max, 1.0Nm recommend.
Note 2: IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec², 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.

Structure and Materials



| | | |
|---|-----------|-------------------|
| 1 | Terminals | #187tab terminals |
| 2 | Flange | Ni plated copper |
| 3 | Molding | Epoxy resin |
| 4 | Case | Epoxy resin |
| 5 | Resistor | Thick film |
| 6 | Substrate | Alumina ceramics |

Pulse Energy Durability



Ordering Information

| Model | TCR | Resistance | Tolerance | Code | Remarks |
|---------|------------|------------|-----------|------|--------------------|
| RPL100F | A | 10R0 | J | Z05 | |
| RPL100F | A (100ppm) | 10 Ω | J (5%) | Z05 | RoHS, tray package |
| | | E24+ (*) | | | |

(*)Resistance value is available following modified E24, +E24, when request for optional resistance please call factory.

| | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.0 | 1.1 | 1.2 | 1.3 | 1.5 | 1.6 | 1.8 | 2.0 | 2.2 | 2.4 | 2.5 | 2.7 | 3.0 | 3.3 |
| 3.6 | 3.9 | 4.0 | 4.3 | 4.7 | 5.0 | 5.1 | 5.6 | 6.2 | 6.8 | 7.5 | 8.0 | 8.2 | 9.1 |

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