

300W, 5KV INSULATING VOLTAGE

CHASSIS MOUNTING NON-INDUCTIVE  
 QUICK CONNECT HIGH POWER RESISTORS

RPL320F5KV



Features and Applications

Quick connect, flat type, 300W high power resistor. Attaching an air-cooled heat sink or water-cooling necessary.

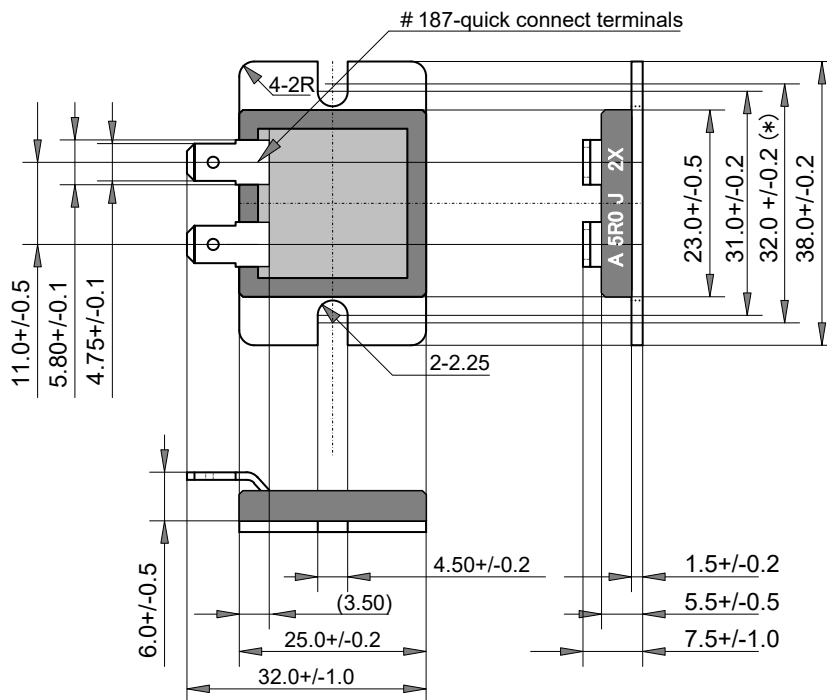
300W rated power at 25°C and 175 °C maximum operating temperature.

#187 quick connect tab terminals provide 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, pulse generators, high frequency amplifiers, theater audio equipment and power electronics.

Dimensions



RPL320F5KV

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Ordering Information

|            |            |            |           |      |                    |
|------------|------------|------------|-----------|------|--------------------|
| Type       | TCR        | Resistance | Tolerance | Code | Note               |
| RPL320F5KV | A          | 10R0       | J         | Z05  |                    |
| RPL320F5KV | A (100ppm) | 10 ohm     | J (5%)    | Z05  | RoHS, tray package |
|            |            | E24+ (*)   |           |      |                    |

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

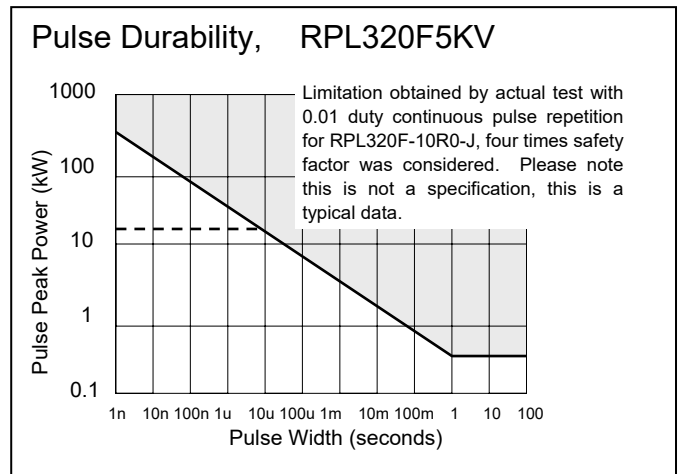
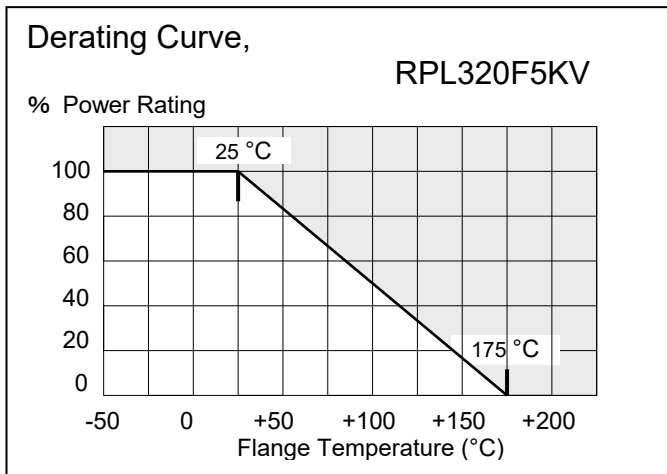
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.0 | 1.1 | 1.2 | 1.3 | 1.5 | 1.6 | 1.8 | 2.0 | 2.2 | 2.4 | 2.5 | 2.7 | 3.0 | 3.3 |
| 3.6 | 3.9 | 4.0 | 4.3 | 4.7 | 5.0 | 5.1 |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

Specifications and Performances

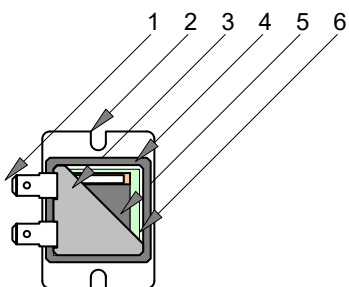
| --                    | Specifications                  | Conditions  |
|-----------------------|---------------------------------|---|
| Rating Power          | 300 W                           | At flange temperature -55°C to +25 °C                             |
| Heat Resistance       | 0.32 °C/W                       | From resistor to flange   |
| Resistance Range      | 0.1 ohm to 1Mohm                | Lowest 0.1 ohm is available, 0.1ohm – 1Mohm                       |
| Nominal Resistance    | E24+                            | Modified E24, additionally, 2.0 and 5.0.                          |
| TCR                   | +/-100 ppm/K (A)                | For -55 to +175 °C  |
| Tolerance             | +/-5% (J)                       |   |
| Operation Temp.       | -55°C to +175°C                 | At flange element surface   |
| Max. Applied Voltage  | $E = \sqrt{P \cdot R}$ or 1000V |   |
| Withstanding Voltage  | 5000 VAC                        | 60 seconds between terminals and flange. Leak current below 0.5mA |
| Load Life             | dR+/-1.0 %                      | Continuous power 1000hours.                                       |
| Humidity              | dR+/-1.0 %                      | 60 °C, 90 to 95%RH, DC0.1W, 1000hours.                            |
| Temperature Cycle     | dR+/-1.0 %                      | -55 °C, 30 min., +155 °C 30min., 5 cycles.                        |
| Insulation Resistance | Over 1000 Meg ohm               | Between terminals and flange.                                     |
| Vibration             | dR+/-0.5 %                      | Note 2  |
| Flammability          | UL94V-0                         | For resistor body   |
| Weight                | 24 grams                        |   |

Note 1: Torque: Mounting 1.6Nm max, 1.0Nm recommend.

Note 2: IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec<sup>2</sup>, 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.



Materials



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