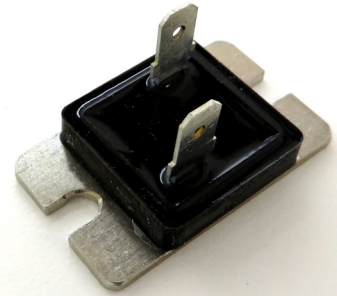


100W, 5kV

CHASSIS MOUNTING NON-INDUCTIVE  
QUICK CONNECT HIGH POWER RESISTORS  
RPL100F



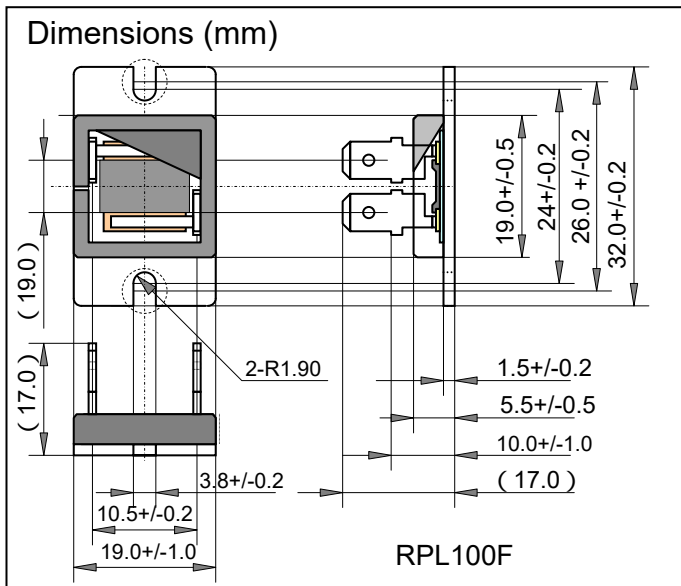
Features and Applications

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

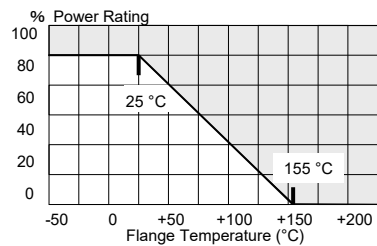
#187 quick connect tab terminals easy to assemble.

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

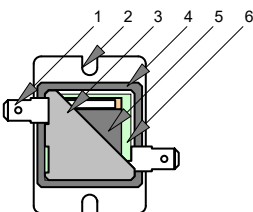


Performances

	Performances	Conditions
Rating Power	100 W	At flange temperature -55 to +25 °C
Heat Resistance	1.1 °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	

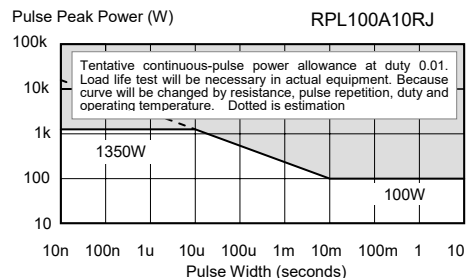
Note 1: Torque: Mounting 1.6Nm max, 1.0Nm recommend.  
Note 2: IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec<sup>2</sup>, 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.

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

20190501