

TPK600/TPK900

Chassis Mounted Non-Inductive High Power Resistor

Compact TO-227 Package: This high-power resistor is designed for small-size applications, offering 600W of power handling capacity. To effectively manage heat, it's essential to attach a sizable air-cooled heat sink or opt for water-cooling solutions. The rated power stands at 600W for both single and dual element configurations. The resistor features M4 screw terminals, ensuring secure connections, and boasts remarkably low series inductance. Its design allows for higher density packing, rendering it resistant to vibrations while optimizing heat dissipation. This versatile component finds application as snubber resistors in power supplies, gate resistors, pulse generators, high-frequency amplifiers, as well as within the damping circuitry of theater audio equipment and loudspeaker system dividing networks.



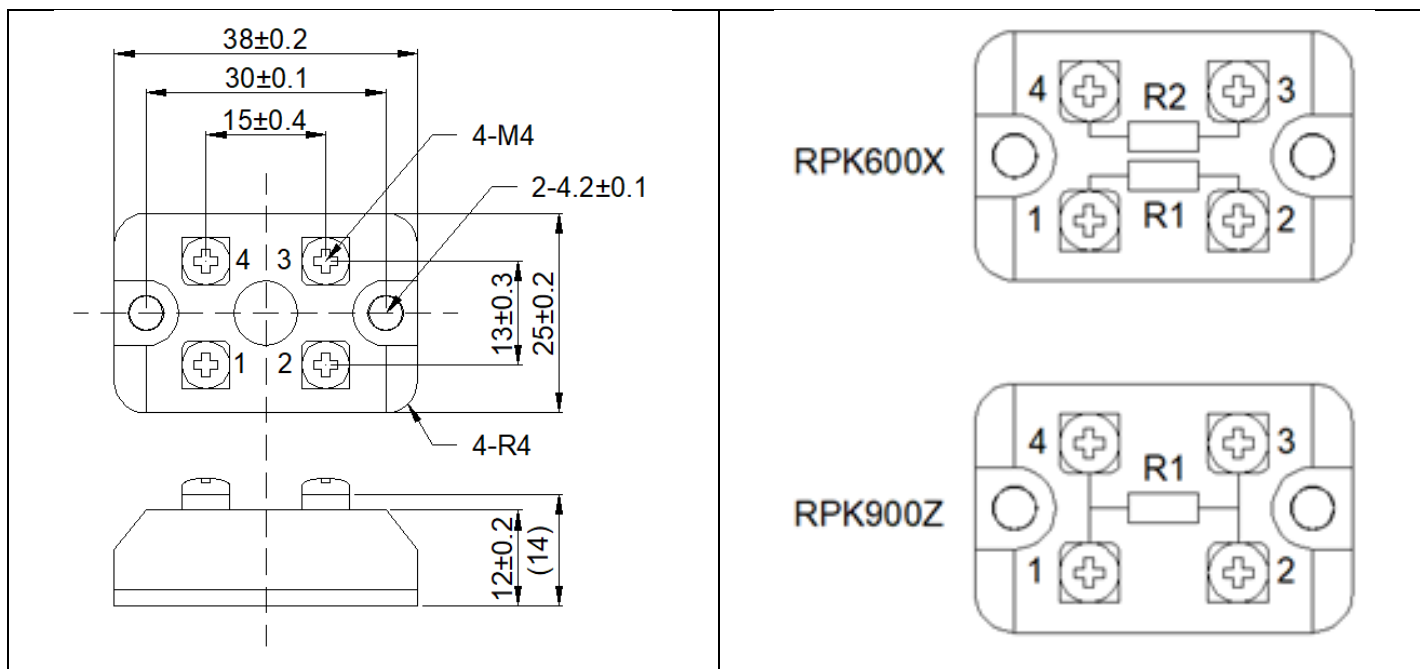
■ GENERAL SPECIFICATIONS

Model	TPK600	TPK900
Power Rating	600 [W] (at flange temperature -55°C to +25°C)	900 [W] (at flange temperature -55°C to +25°C)
Resistance Range	50 [Ω] - 1 [KΩ] (Dual)	50 [Ω] - 1 [KΩ] (Single)
Nominal Resistance	E24+	E24+
Tolerance	±5 [%]	±5 [%]
T.C.R	±50 [ppm/°C]	±50 [ppm/°C]

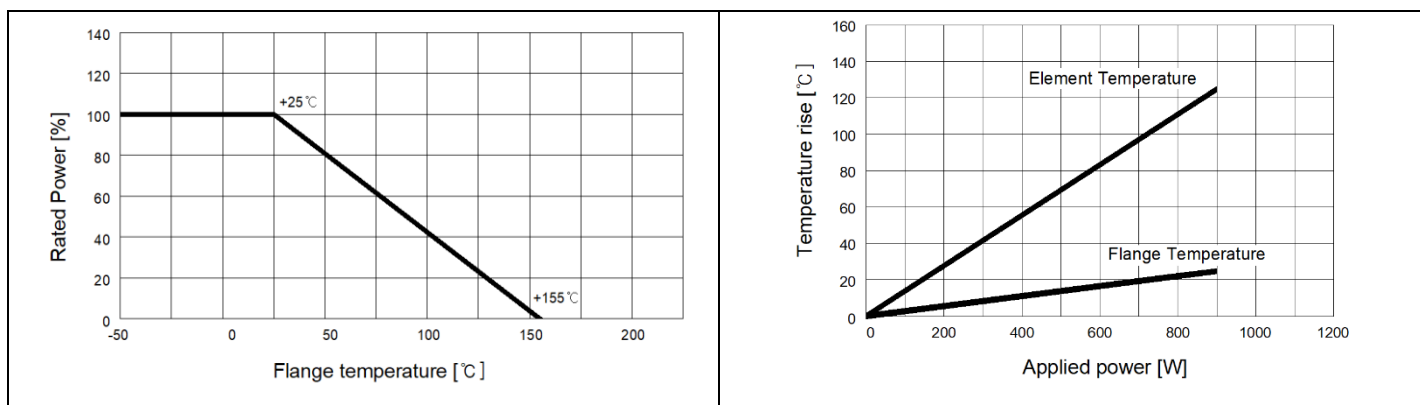
■ CHARACTERISTICS

Model	TPK600	TPK900
Operation Temp. Range	-55 ~ +155 [°C] (at flange temperature)	
Max. Applied voltage	1000 [Vac] or $E=\sqrt{P \cdot R}$	
Short time overload	600W (5sec. with heat-sink)	900W (5sec. with heat-sink)
	±(0.25 [%]+0.05Ω) (Rating watt*1.5, 2.5sec. with cooler.)	
Withstanding voltage	2500 [Vac] (60 sec. 1mA)	
Load life	±(1.0 [%]+0.05Ω) (25°C, 90min. On, 30min. Off, 1000hr.)	
Humidity	±(1.0 [%]+0.05Ω) (40°C, 90-95%RH, DC0.1W, 1000hr.)	
Temperature cycle	±(1.0 [%]+0.05Ω) (-55°C 30min., +155°C 30min., 20cycles)	
Insulation resistance	Over 1000 [MΩ] (Between terminals and tab)	
Vibration	±0.25 [%]	
Weight	36.1 [g]	

DIMENSIONS



DERATING CURVE AND TEMPERATURE RISE



ORDERING PROCEDURE EXAMPLE

Model	Z	T.C.R	Resistance	Tolerance	Note
TPK900	Z	C	100ohm	J	Z03
TPK600	X	C (50ppm/°C)	+E24 (50R-1K0) (R1=R2)	J (±0.5%)	Z03 (Tube) (RoHS)
TPK900	Z				

* Resistance value (*) is available following modified E24, +E24.

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