

550W, 600W

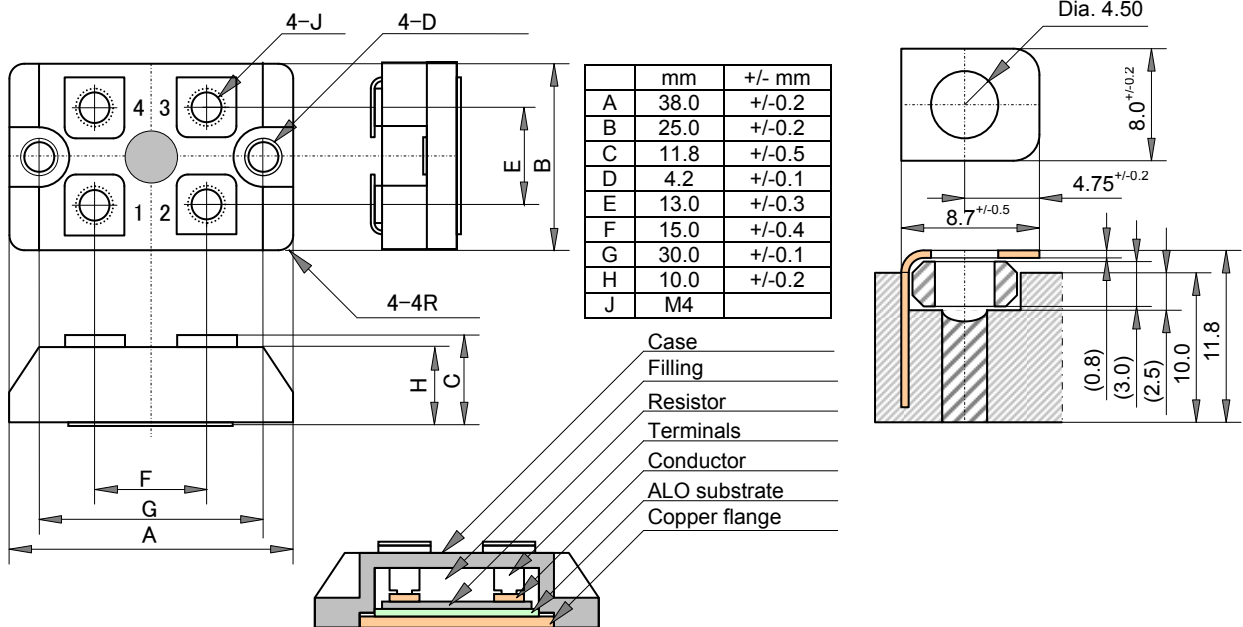
CHASSIS MOUNTING NON-INDUCTIVE  
HIGH POWER RESISTORS  
TCP550, TCP600



Features and Applications

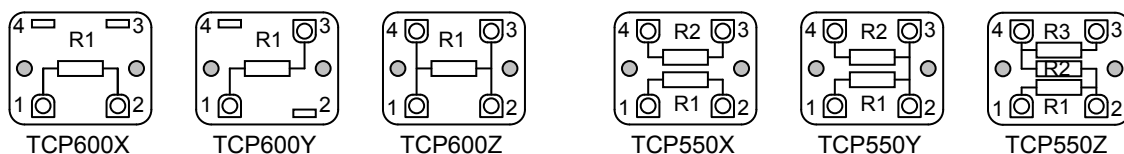
Small size SOT227, light weight, 600W high power resistor install on air-cooled heat sink or water-cooling is necessary.  
 New ceramics substrate shown highest heat conduction play small size high power resistor.  
 Completely resin filled structure provides high insulation voltage between heat-sink / resistor and partial discharge performance, long-life stable operation.  
 2.5kV insulation voltage is standard and 4.0kV insulation is available in option.  
 Various 6 types of circuit configuration gives ease customer's applications.  
 Very low series inductance and parallel capacitance make wide frequency range operation.  
 Applications include snubber resistors, filter resistors, bleeder resistor, current detect for automotive electronics and many types of power electronics as UPS, power supply, professional audio.

Dimensions



Note: The depth of the screw hole is about 4.3mm from the surface of the terminal plate.

Schematics



# TCP550, TCP600 CHASSIS MOUNTING NON-INDUCTIVE HIGH POWER RESISTORS

## Ordering Information

Type TCP600	Terminal Connection Z	Terminal Screws Option -	Resistance 101 (*)	Tolerance J	TB
TCP550	X Y Z	-(w/o screws)  (**)	+E12 R1=R2=R3	J (5%)	TB (RoHS)

(\*) When a network circuit configuration contains two resistors, ordering is as TCP550X101JTB.

## Specifications and Performances

	TCP550	TCP600	Conditions
Rating Power	600 Watts	600 Watts	At flange temp. -55°C to +25°C
Configuration	XYZ	XYZ	
Weight	30.0gr	30.0gr	
Thermal Resist.	0.11 °C/W	0.11 °C/W	
Single or Dual	More than one		Same resistance, R1= R2= R3
Resistance Range	50Ω to 1kΩ		
Resistance	E12+		Additionally, 2.5 and 5.0.
TCR	+/-100 ppm/°C		For -55°C to +120°C
Tolerance	+/-5%(J)		1% optional
Operation Temp.	-55 - +155 °C		At resistor surface
Max. Voltage	Less than $E = \sqrt{P \cdot R}$ or 1000V		
Max. Current	100A		
Withstanding	2500 VAC		60 seconds-1mA. 4KVAC optionally available
Capacitance between terminals	13.1pF		
Inductance	13.7nH		
Load Life	+/-1.0 %		25°C, 90 min.ON, 30min.OFF, 1000h.
Humidity	+/-1.0 %		40°C, 90 to 95%RH, DC0.1W, 1000h.
Temp Cycle	+/-1.0 %		Note 1
Short Time OL	Rated power		Note 2
Insulation	Over 1000 Meg Ω		Between terminals and flange.
Vibration	+/-0.25 %		Note 4
Flammability	UL94V-0		
Weight			

Note1: -55°C, 30 min., +120°C 30min., 20cycles.

Note2: Several seconds overload can not be applied.

Note3: Torque: Terminal 1.0Nm max, 0.6Nm recommend. Mounting 1.6Nm max, 1.0Nm recommend.

Note 4: IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec<sup>2</sup>, 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.

