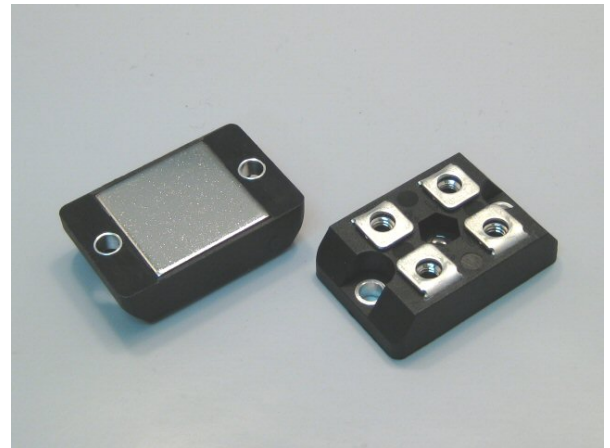


300W

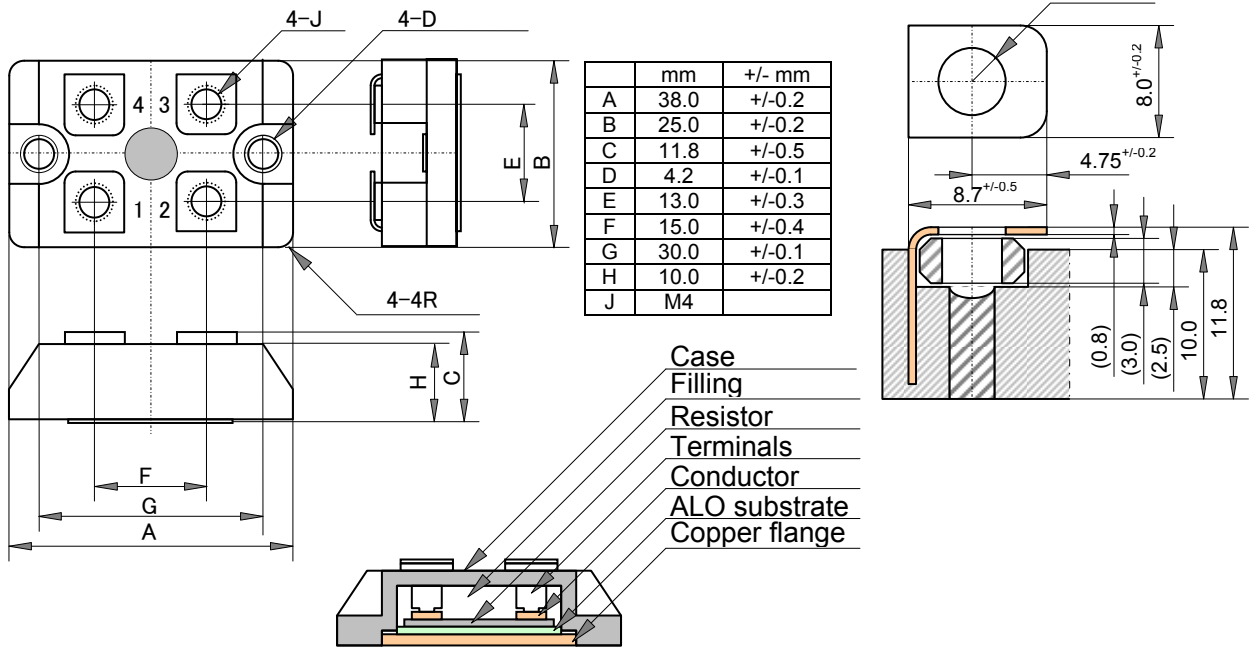
CHASSIS MOUNTING NON-INDUCTIVE  
HIGH POWER RESISTORS  
TCP250, TCP300



Features and Applications

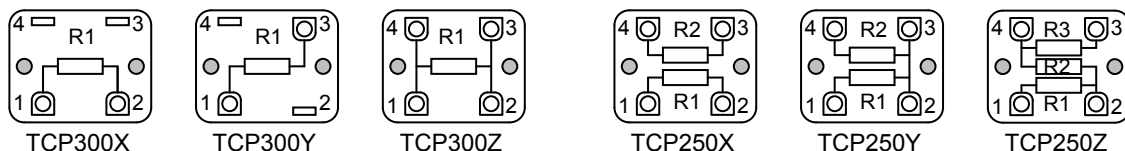
Small size SOT227, light weight, 300W high power resistor install on air-cooled heat sink or water-cooling is necessary.  
 Completely resin filled structure provides high insulation voltage between heat-sink / resistor and partial discharge performance, long-life stable operation.  
 2.5kV insulation voltage is standard and 4.0 kV 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



# TCP250, TCP300 CHASSIS MOUNTING NON-INDUCTIVE HIGH POWER RESISTORS

## Ordering Information

Type	Terminal Connection	Terminal Screws Option	Resistance	Tolerance	
TCP300	Z -	S	101 (*)	J	TB
TCP250	X	-(w/o screws)	+E12	J (5%)	TB
TCP300	Y	S(w/ screws)	R1=R2=R3		(RoHS)
	Z	M4-5mm only			

(\*\*)

(\*) When a network circuit configuration contains two resistors, ordering TCPM250X101JTb.

(\*\*) Terminal screws provide by showing screw option 'S' in ordering information, M4-5mmL only.

(\*\*\*) When ordering of the optional 4KV insulation, please specify P/N as TCP300X4KV 101JTb.

## Specifications and Performances

	TCP250	TCP300	Conditions
Rating Power	250 W	300W	At flange temp. -55°C to +85°C
Configuration	XYZ	XYZ	
Weight	30.0gr	30.0gr	
Thermal Resistance.	0.23°C/W	0.23°C/W	
Single or Dual Configuration	More than one		Same resistance, R1= R2= R3
Resistance Range	0.1 ohm to 1Mohm		only single Z connection at 0.1-1.0Ω
Resistance	E12+		Additionally, 2.5 and 5.0.
TCR	+/-100 ppm/°C		For -55 to +125 °C, typical, over10 ohm
Tolerance	+/-5%(J)		1% option
Operation Temp.	-55 - +155 °C		At resistor element surface
Max. Voltage	Less than $E = \sqrt{P \cdot R}$ or 1000V		
Max. Current	100A		
Insulation Voltage	2500 VAC / 4000VAC		60 seconds-1mA. 4KVAC optionally available
Capacitance between terminals	13.1pF		typical
Inductance	13.7nH		typical
Load Life	+/-1.0 %		25°C , 90 min.ON, 30min.OFF, 1000h.
Humidity	+/-1.0 %		40°C , 90 to 95%RH, DC0.1W, 1000h.
Tem. Cycle	+/-1.0 %		Note 1
Short Time Over Load	Rated Power		Note 2
Insulation	Over 1000 Meg Ω		Between terminals and flange.
Vibration	+/-0.25 %		Note 4
Flammability	UL94V-0		
Weight	30.0 grams		

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

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.

