

TPU SERIES

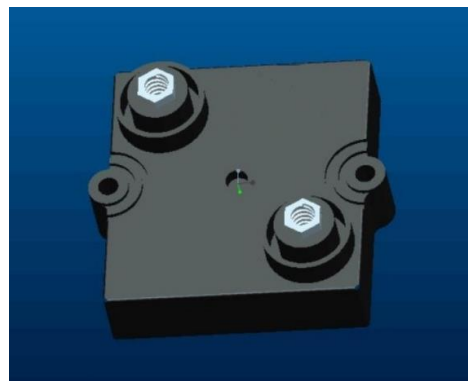
Thick Film Non-inductive Power Resistor

Features and Applications

Recommendations for mounting onto a heatsink to enhance the heat dissipation. The bottom case is attached to the system heatsink, and the resistor dissipates the heat through the heat exchange between the bottom case and the heatsink. The ambient temperature here refers to the bottom case temperature of the resistor, which is generally referred to as the temperature in the center of the bottom case.

Non-Inductive, Resistance-high voltage, small size, high power, long life, Moisture Resistance, High Stability.

Power supply, control equipment, automatic control, power electronics.



GENERAL SPECIFICATIONS

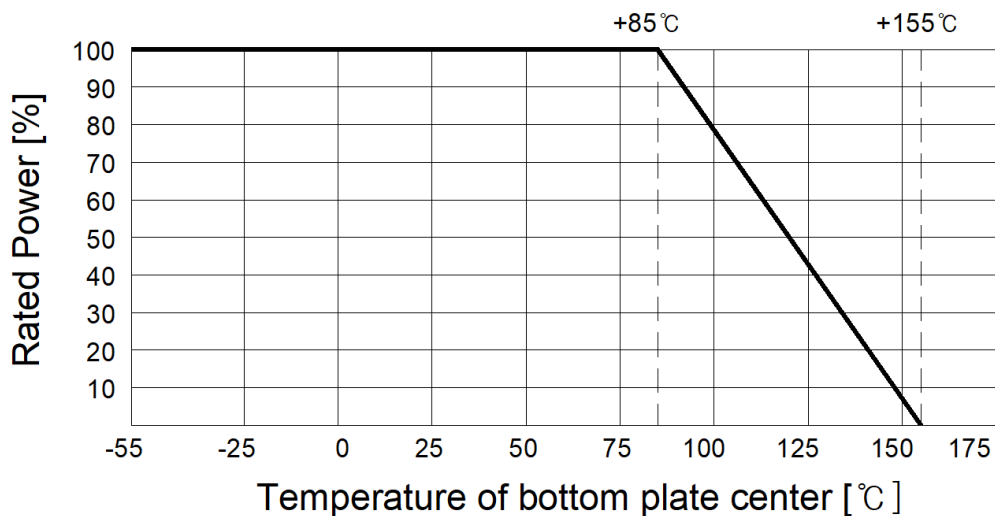
Model	TPU300	TPU600	TPU800
Rated power (at bottom plate center temp. $\leq 85^{\circ}\text{C}$)	300 [W]	600 [W]	800 [W]
Resistance range	4.7 [Ω] – 500 [M Ω]		
Tolerance	F [$\pm 1\%$] / G [$\pm 2\%$] / J [$\pm 5\%$] / K [$\pm 10\%$]		
T.C.R	$\pm 50\text{ppm}/^{\circ}\text{C} \sim \pm 250\text{ppm}/^{\circ}\text{C}$		
Max. working Voltage	5KV - 11KV		
Insulation Voltage	6KV		
Contacts	M5		
Mounting	M4		
Operating temperature	$-55^{\circ}\text{C} \sim +150^{\circ}\text{C}$		

CHARACTERISTICS

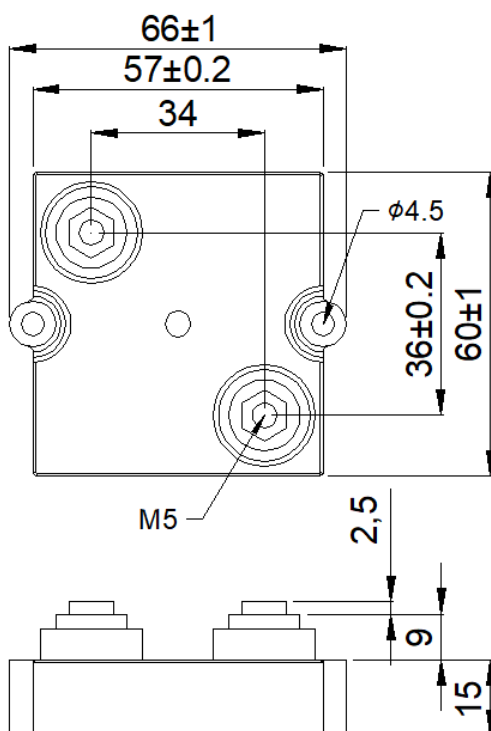
Values in [] mean changed in Ω after test

Items	Requirement	Conditions
Short Time Overload	$\Delta R \leq \pm(0.2\%R + 0.1\Omega)$	1.5times rated power for 5seconds, but not over 1.5times continuous U_{max} .
Insulation Resistance	$\geq 10G\Omega$ 1Min	500Vdc.
Load Life	$\Delta R \leq \pm(0.5\%R + 0.1\Omega)$	At rated voltage, 90min "On", 30min "Off", total 1,000hours.
Humidity Resistance	$\Delta R \leq \pm(0.4\%R + 0.1\Omega)$	$40^{\circ}\text{C} \pm 2^{\circ}\text{C}$, RH 90%-95%, 240hours.
High/Low Temp.	$\Delta R \leq \pm(0.2\%R + 0.1\Omega)$	Store at $-65^{\circ}\text{C} \sim +125^{\circ}\text{C}$ for 2H, cycle for 5times.

DERATING CURVES

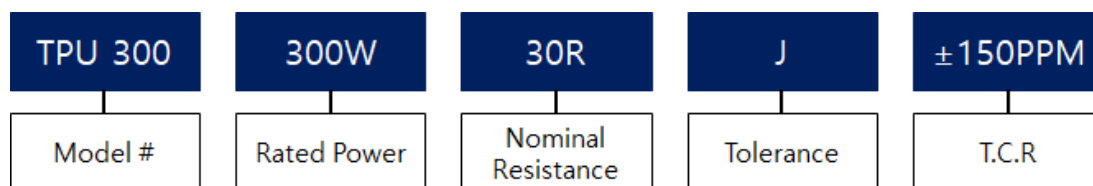


DIMENSIONS[mm]



* Unspecified tolerance is ±0.3mm

ORDERING PROCEDURE EXAMPLE



Note : Please confirm the technology parameters before order.