

## TR 140 Power Thick Film Resistor

Catalogue

Feature

Application

Construction

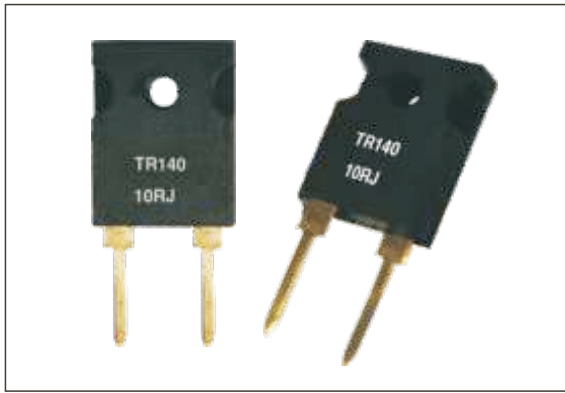
Dimensions

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Derating Curve

Performance



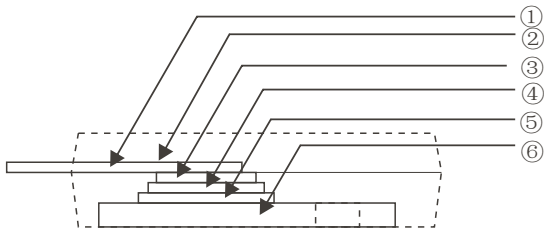
## Feature

- I Using thick film, Non-inductive, TO-247 Standard package
- II Rating power 140W(the temp of floor center less than 25°C)
- III Resistance range :from 0.5Ω to 2.2KΩ
- IV Tolerance: ±10%、±5%
- V The range of working temperature :-55°C ——155°C
- VI TCR: ±50PPM/°C, ±100PPM/°C, ±250PPM/°C
- VII The max working voltage :700V
- VIII Withstand voltage in insulating layer:2500V
- IX Dielectric resistance: Min 10000MΩ

## Application

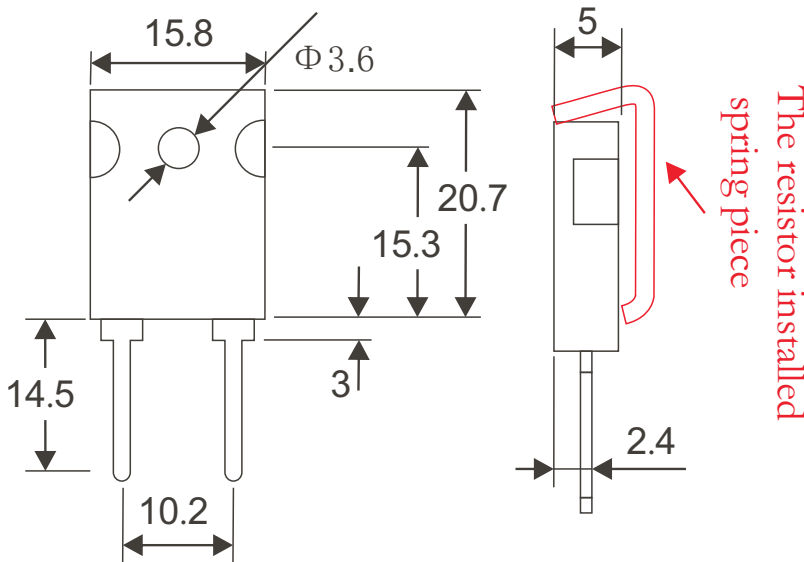
Wind power generation, power transmission, robot, frequency converter, switching power supply and so on.

## Construction



①	Leads, Tin plated Cu
②	Mold, epoxy, UL94-V0
③	Conductor, Cu
④	Resistor, NiCr or RuO
⑤	Substrate, Alumina
⑥	Flange, Ni plated Cu

## Dimensions



## Reference Standards

JISC 5201-1

## Ordering Information

Example

TR	140	J	10R00	C2
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance	T.C.R

(1)Type:TR SERIES

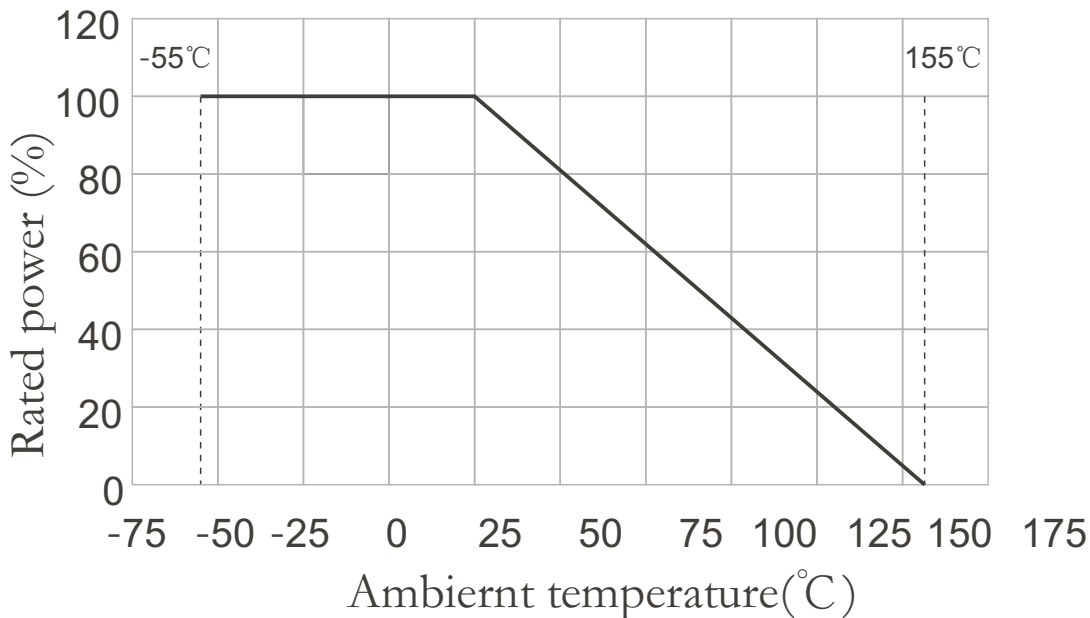
(2)Power Rating: 140=140W

(3)Tolerance: J=  $\pm 5\%$ ,K=  $\pm 10\%$

(4)Resistance Value:0R500=0.5 $\Omega$ ,10R00=10 $\Omega$ ,1K000=1K $\Omega$

(5)T.C.R: C=  $\pm 50\text{ppm}/^\circ\text{C}$ ,A=  $\pm 100\text{ppm}/^\circ\text{C}$ ,H=  $\pm 250\text{ppm}/^\circ\text{C}$

## Derating Curve



## Performance

Test item	Performance requirements	Test methods(JIS C 5201-1)
Short time overload	$\Delta R \leq \pm (0.5\% R_0 + 0.05\Omega)$	1.5 times rated power,10S( $U_{max} \leq U_L = 700V$ )
Temp cycle	$\Delta R \leq \pm (0.5\% R_0 + 0.05\Omega)$	-55°C , 30min/125°C ,30min,5period
Load life	$\Delta R \leq \pm (1\% R_0 + 0.05\Omega)$	Rated power 1000h,the temp of floor center < 25°C
Damp heat	$\Delta R \leq \pm (1\% R_0 + 0.05\Omega)$	40°C , RH93 $\pm 3\%$ , 56days