

● Features

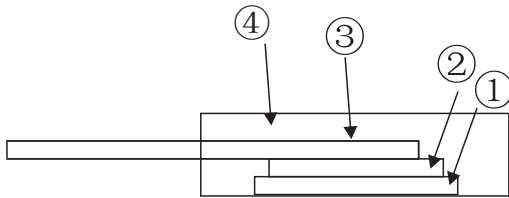
- I At 25°C case temperature heat sink mounted
- II TO-247 style power package
- IIIMolded case for protection and easy to mount
- IVElectrically isolated case
- V Non-Inductive design
- VI RoHS Compliant

Low Energy Pulse Loading
UPS
Voltage Regulation

● Application

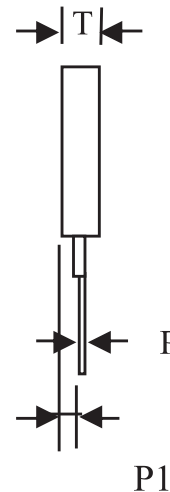
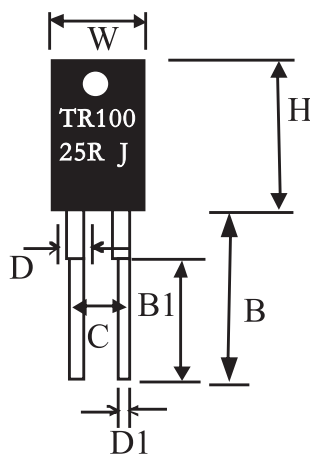
Switching Power Supplies
Snubbers Circuits
Automated Machine Controller
RF Power Amplifiers

● Construction



①	Substrate, Alumina
②	Resistive layer
③	Lead wire
④	Full molded construction

● Dimensions



Type	Power	Dimensions(mm)									
		W	H	B	B1	D	D1	C	T	P	P1
TR	100W	15.6~16.0	20.5~20.96	13.5~15.5	11.2~13.2	3.45~3.81	1.42~1.6	9.9~10.42	4.69~5.21	0.55~1.0	2.15~2.67

Ordering Information

Example:

TR100	100	D	10R0	C2	B
(1)	(2)	(3)	(4)	(5)	(6)
Series Name	Power	Resistance	Resistance	T.C.R	Packaging

(1) Type: TR100 SERIES

(2) Power Rating: 100=100W

(3) Tolerance: D= ± 0.5%, F= ± 1%, J= ± 5%, K= ± 10%

(4) Resistance Value: 10R0=10Ω

(5) T.C.R: C2= ± 50ppm/°C, C1= ± 100ppm/°C, C= ± 200ppm/°C or ± 300ppm/°C

(6) Packaging: B=Box(Packaging : Plastic recloseable bags(MOQ : 100PCS))

Reference Standards

JISC 5201-1

Applications And Ratings

Type	Power (25 °C)	Tolerance			T.C.R ppm/°C
		± 1%	± 5%	± 10%	
TR100	100	0.05Ω~1Ω			No Specified
		> 1Ω~3Ω			± 300
		> 3Ω~10Ω			± 100 ± 200
		> 10Ω~10KΩ			± 50 ± 100 ± 200
		> 10KΩ~1MΩ			+ 200 + 300

– Operating Voltage: 700 max.

– Dielectric Strength: 1800VAC

– Insulation Resistance: 10GΩmin.

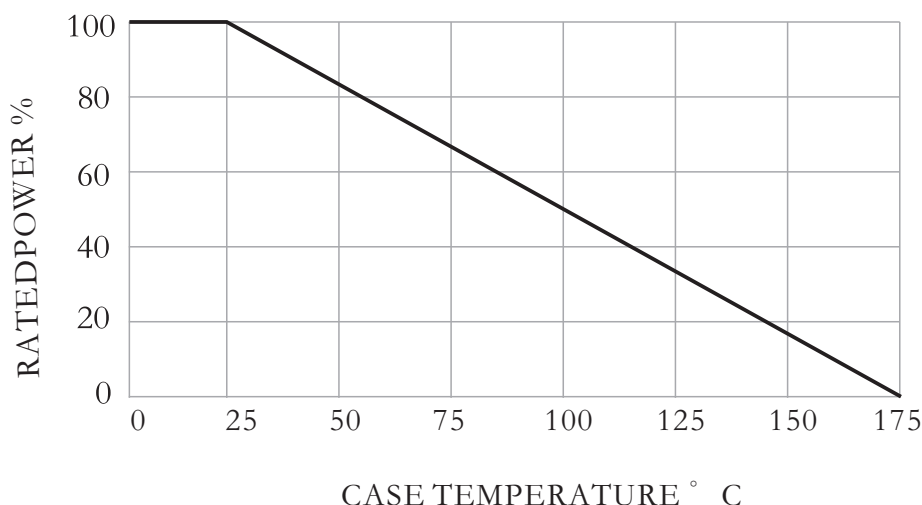
– Working Temperature Range: -65°C to +150°C

– TR100 Working Temperature Range: -65°C to +175°C

– Resistance Value < 1Ω is available

– Free air Power: 25°C, rated at 3.5W

Derating Curve



● Performance

Test Items	Performance Requirements	Test Methods(JIS C 5 201-1)
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C , ΔR taken at +105°C
Short Time Overload	$\Delta R \pm 0.3\%$	2 times rated power with applied voltage not to exceed 1.5 times Maximum continuous operating voltage for 5 seconds
Load Life	$\Delta R \pm 1.0\%$	2,000 hours at rated power
Damp Heat with Load	$\Delta R \pm 0.5\%$	40 ± 2°C , 90~95% R.H. Max. working voltage for 1000 hrs with 1.5 hrs “ON” and 0.5 hrs “OFF”
Solderability	90% min. Coverage	245 ± 5°C for 3 seconds
Thermal Shock	$\Delta R \pm 0.3\%$	-65°C ~150°C , 100 cycles
Terminal Strength	$\Delta R \pm 0.2\%$	(Pull Test) 2.4N
Vibration, High Frequency	$\Delta R \pm 0.2\%$	20g peak
Dielectric strength:	$\Delta R \pm 0.15\%$	1800Vac 60 seconds