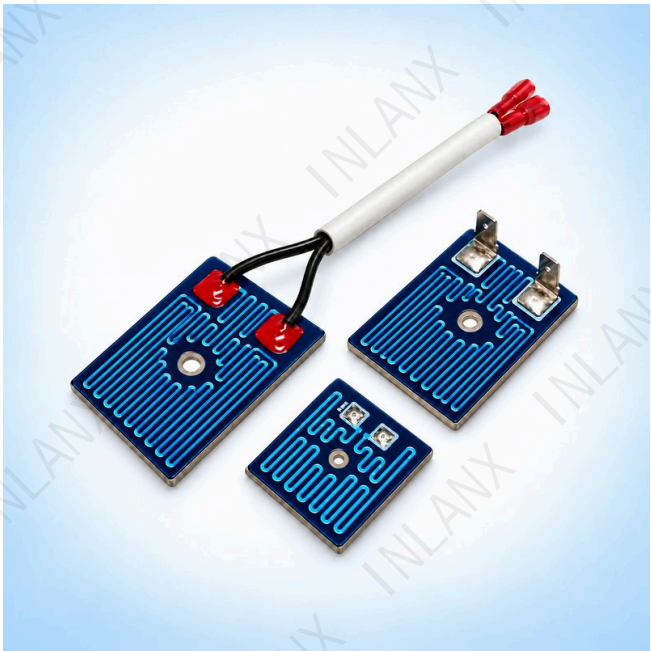
RTB Thick-Film Braking Resistors

Features

- Simple construction and low installation cost.
- Excellent surge capability.
- Non-inductive design.
- RoHS compliant.



Applications

Especially suitable for dynamic motor braking and industrial welding-machine braking.

Outline Dimensions • mm

Model	L	W	Substrate thickness	ØD	a	b
RTB160	31.85	28	0.9	2.2	8	5
RTB180	49.3	35.85	0.9	3.2	3.2	11.2
RTB200	60.96	40.64	0.9	5.3	4.7	13

Specifications

Item	RTB160 / RTB180 / RTB200
Resistance (Ω)	12, 22, 47, 100, 150
TCR	600ppm/°C
Max. resistor hot-spot temperature	375°C
Resistance tolerance	±10%
Max. pulse power (>5000 cycles; Fig. 2)	0.5kW / 1.5kW / 2kW
Stability after 5000 cycles (nominal load)	±5%
Minimum dielectric withstand	2500V DC

Terminal Styles

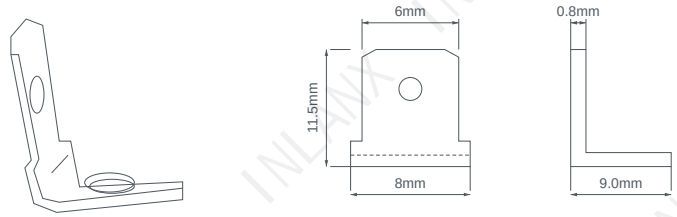
I: solder only; L: flying leads; T: push-on connectors.

Flying leads are 250mm long and rated up to 40A.

TV-3 cables conform to UL 758 and CSA C22.2 No.127.

HBC-1079 silicone sealant conforms to UL94 and UL746A.

Style T • Push-on Connector • mm



Dimension	mm
Blade width	6
Height	11.5
Base width	8
Thickness	0.8
Base length	9.0

Fig. 1 • Power Derating

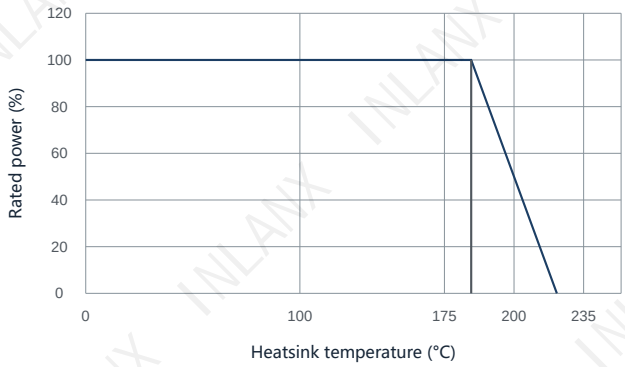
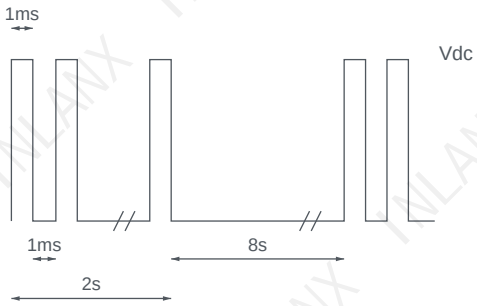


Fig. 2 • Pulse Conditions

Fig. 2 · Duty cycle: 2s ON / 8s OFF



Test References

Ref. 1: tests on a 0.53°C/W heatsink with forced air at 5m/s, for 50K cycles.

Ref. 2: tests on a 0.53°C/W heatsink without air cooling, RT=25°C.

Ordering Example

RTB	200	100R	K	L	W
Series	Rated power	Resistance	Tolerance	Terminal style	Source code

The source gives W without a definition.