

## POWER THICK FILM RESISTOR



RTO 20 and RTO 50

## 20 W and 50 W Power Resistor, Thick Film Technology, TO-220



#### **KEY BENEFITS**

- TO-220 package: compact and easy to mount
- 20 W and 50 W power ratings available with through-hole or SMD versions
- Broad resistance range: 0.01  $\Omega$  to 1 M $\Omega$
- Low thermal resistance down to 2.6 °C/W
- Non-inductive element

#### **APPLICATIONS**

- Industrial and medical power supplies
- Test equipment
- Power conversion
- Current sensing
- Snubbers

#### **RESOURCES**

- Datasheet: RTO 20 <a href="http://www.vishay.com/doc?50005">http://www.vishay.com/doc?50005</a>
- Datasheet: RTO 50 <a href="http://www.vishay.com/doc?50035">http://www.vishay.com/doc?50035</a>
- For technical questions contact <u>sfer@vishay.com</u>

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# RTO 20 FEATURES

- 20 W at 25 °C heatsink mounted
- High power dissipation to size ratio
- Wide resistance range from 0.01  $\Omega$  to 550  $k\Omega$
- Negligible inductance
- Easy mounting
- TO-220 package: Compact and easy to mount
- Compliant to RoHS directive 2011/65/EU

Two versions of this thick film resistor are available:

- · A radial leaded version for PCB mounting
- · A flat lead version for surface mounting

The well known TO-220 package is compact and easy to mount.

#### RTO 50 FEATURE

- 50 W at 25 °C heatsink mounted
- · Adjusted by sand trimming
- · Leaded or surface mount versions
- High power to size ratio
- Non inductive element
- Compliant to RoHS directive 2011/65/EU



Because of the knowledge and experience in Thick Film technology, Vishay Sfernice has been able to develop a high power resistor in a TO-220 package called RTO 50. The special design of this component allows the dissipation of 50 W when mounted on a heatsink. The ohmic value is adjusted by sand trimming. This process does not generate hot spots as in laser trimming, which could lead to microcracks on each side of the curve. This process improves the reliability and the stability of the resistor and at the same time gives a good overload capability.



