

## **TDK offers Pb-free NTC thermistors for a wide range of automotive and industrial applications**

TDK Corporation announces the L862 (B57862L) NTC thermistors with bendable wires and the L871 (B57871L) lead spacing NTC thermistors that can be used in a wide range of automotive and industrial applications. Both series are Pb-free and can measure temperatures between -40 °C and +155 °C with a tolerance of  $\pm 1\%$  and  $\pm 3\%$  respectively. At room temperature, their maximum power dissipation is 60 mW. Both series are available with different rated resistances between 1 k $\Omega$  and 100 k $\Omega$  and different R/T characteristics (see tables below and on the next page). After 10,000 h at +70 °C, the deviation of the resistance at room temperature  $R_{25}$  is less than 3%.

The sensor element of the L862 that is encapsulated with a black epoxy coating is just 2.6 x 6.5 mm (D x H) in size and has insulated leads of silver-plated nickel wire (AWG 30,  $\phi$  0.25 mm). The total length of the sensor including the wires is 50 mm, with 6 mm stripped. While the dissipation factor  $\delta_{th}$  of the sensor is 1.4 mW/K, its thermal cooling time constant  $\tau_c$  is 14 s.

Also, the sensor element of the L871 is encapsulated with a black epoxy coating. It is just 2.8 x 6.0 mm (D x H) in size and has Cu-clad steel wires ( $\phi$  0.4 mm) with a spacing of 2.5 mm. While the dissipation factor  $\delta_{th}$  of the sensor is 3 mW/K, its thermal cooling time constant  $\tau_c$  is 9 s.

### **Main applications**

Temperature measurement in a wide variety of automotive and industrial applications (e.g., battery packs, power banks, energy storage, drones)

### **Main features and benefits**

- Short response time
- High measuring accuracy
- Different tolerances available

