

 Press Information

## Temperature Sensors

# TDK launches high-reliability automotive NTC thermistors rated for +175 °C

- Guarantees operation in high-temperature environments up to +175 °C
- Adopts AgPd terminals compatible with conductive-glue mounting
- AEC-Q200 compliant (automotive grade)

February 17, 2026

TDK Corporation (TSE:6762) announced today that it has expanded its NTCSP series of NTC thermistors. These components are designed for conductive-glue mounting for operation in high-temperature environments up to +175 °C. Mass production of this series began in February 2026.

To drive higher automotive performance, more powerful and heat-resistant power semiconductors are required. Consequently, electronic components mounted in these power modules must also be able to withstand higher temperatures. While the maximum guaranteed operating temperature for TDK's existing products was +150 °C, the company has now expanded its range to cover up to +175 °C.

This product is a high-reliability device compliant with AEC-Q200 and realizes a wide operating temperature range of -55 °C to +175 °C. It can be used for various temperature detection and temperature compensation applications across low to high temperature ranges. It is suitable for automotive applications such as anti-lock braking systems (ABS), transmissions, and engines. By adopting AgPd (silver-palladium) terminals compatible with conductive-glue mounting, this series can operate at +175 °C; this was difficult to achieve with conventional solder mounting.

The NTCSP series offers 10 kΩ and 100 kΩ types in a 1.6 x 0.8 mm package.

TDK will continue to develop NTC thermistors to meet a wide variety of needs, including expansion of chip sizes, thermistor characteristics, and operating temperature ranges.

-----

## Glossary

- AEC-Q200: Reliability standard for automotive electronic components established by the Automotive Electronics Council (AEC)
- AgPd: Silver-palladium alloy
- Power semiconductor: Semiconductor devices for efficient control of high power/high voltage

## Main applications

- Temperature detection and temperature compensation for applications used across a wide temperature range

## Main features and benefits

- Mounting with conductive glue
- Operating temperature range: -55 °C to +175 °C
- AEC-Q200 compliant, high-reliability product for automotive applications

Product name	External dimensions [mm]	Resistance (25 °C) [kΩ]	Resistance tolerance [%]	B constant (B25/85) [K]	B constant tolerance [%]
NTCSP163JF103FT1H	1.6 x 0.8 x 0.8	10	1	3435	1
NTCSP164KF104FT1H		100	1	4485	1
-----					

## About TDK Corporation

TDK Corporation (TSE:6762) is a global technology company and innovation leader in the electronics industry, based in Tokyo, Japan. With the tagline "In Everything, Better" TDK aims to realize a better future across all aspects of life, industry, and society. For over 90 years, TDK has shaped the world from within; from the pioneering ferrite cores to cassette tapes that defined an era, to powering the digital age with advanced components, sensors, and batteries, leading the way towards a more sustainable future. United by TDK Venture Spirit, a start-up mentality built on visions, courage and mutual trust, TDK's passionate team members around the globe pursue better—for ourselves, customers, partners, and the world. Today, the state-of-the-art technologies of TDK are in everything, from industrial applications, energy systems, electric vehicles, to smartphones and gaming, at the core of modern life. TDK's comprehensive, innovative-driven portfolio includes cutting-edge passive components, sensors and sensor systems, power supplies, lithium-ion and solid-state batteries, magnetic heads, AI and enterprise software solutions, and more—featuring numerous market-leading products. These are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics, TDK-Lambda, TDK SensEI, and ATL. Positioning the AI ecosystem as a key strategic area, TDK leverages its global network across the automotive, information and communication technology, and industrial equipment sectors to expand its business in a wide range of fields. In fiscal 2025, TDK posted total sales of USD 14.4 billion and employed about 105,000 people worldwide.

You can download this text and associated images from  
[https://www.tdk.com/en/news\\_center/press/20260217\\_01.html](https://www.tdk.com/en/news_center/press/20260217_01.html)

Further information on the products can be found under  
[https://product.tdk.com/system/files/dam/doc/product/sensor/ntc/chip-ntc-thermistor/catalog/tpd\\_automotive\\_ntc-thermistor\\_ntcsp\\_en.pdf](https://product.tdk.com/system/files/dam/doc/product/sensor/ntc/chip-ntc-thermistor/catalog/tpd_automotive_ntc-thermistor_ntcsp_en.pdf)

## Contacts for regional media

Region	Contact		Phone	Mail
Japan	Mr. Kotaro Ose	TDK Corporation Tokyo, Japan	+813 6778-1055	<a href="mailto:TDK.PR@tdk.com">TDK.PR@tdk.com</a>
ASEAN	Ms. Jiang MAN Ms. Pei Lu LEE	TDK Singapore (Pte) Ltd. Singapore	+65 6273 5022	<a href="mailto:tdk.asean-inquiry@tdk.com">tdk.asean-inquiry@tdk.com</a>
Greater China	Ms. Clover XU	TDK China Co., Ltd. Shanghai, China	+86 21 61962307	<a href="mailto:TDK.PR-CN@tdk.com">TDK.PR-CN@tdk.com</a>
Europe	Mr. Frank TRAMPNAU	TDK Management Services GmbH Duesseldorf, Germany	+49 211 9077 127	<a href="mailto:frank.trampnau@tdk.com">frank.trampnau@tdk.com</a>
America	Ms. Sara M. LAMBETH	TDK Corporation of America Plano, TX, USA	+1 972-409-4519	<a href="mailto:sara.lambeth@tdk.com">sara.lambeth@tdk.com</a>