

Precise surface temperature sensors with lug terminals for up to 150 °C

September 21 2012



TDK Corporation has expanded the NTCGP series of TDK NTC temperature sensors with types featuring lug terminals for the precise measurement of surface temperatures from -40 °C to +150 °C. With their metal lug terminals the compact and highly-reliable epoxy-dipped NTC thermistors can be screwed directly to circuit boards and mounted components. Mass production will begin in September 2012.

The new lug terminal types of the NTCGP series are available in two designs: the standard design with a nominal resistance of 50 k Ω and B coefficient (B25/85) of 3950 K and the linear output type with a nominal resistance of 10 k Ω and B coefficient (B25/85) of 2250 K.

The spread of electric vehicles and solar power is gaining momentum. In

order to improve their performance and reliability, precise temperature management of the control circuit boards and electronic components used in these vehicles and systems is becoming even more important. Thanks to the new NTC ceramic elements with linear output characteristics over a wide temperature range, the expanded NTCGP series is ideally suited for temperature measurement of DC-DC converters in electric and plug-in hybrid vehicles and of DC AC inverters of solar power systems, as well as wide range of other applications.

Main applications

- Surface temperature measurement of circuit boards and mounted components of DC-DC converters in electric and plug-in hybrid electric vehicles and in DC-AC inverters of [solar power systems](#).

Main features and benefits

- NTC [temperature sensors](#) with lug terminals can detect temperatures from -40 °C to +150 °C.
- Newly-developed ceramic elements provide linear output from low to high temperatures.
- Direct screw attachment of lug terminals to circuit boards and mounted components enables accurate temperature detection.

Source: TDK Corporation

Citation: Precise surface temperature sensors with lug terminals for up to 150 °C (2012, September 21) retrieved 20 June 2024 from <https://phys.org/news/2012-09-precise-surface-temperature-sensors-lug.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.