



Electronic Parts and Components

Press Release for the Trade Media

March 2009

PTC thermistors Exact level sensing

EPCOS has developed two new PTC components with stainless steel packages for sensing the level of liquids. The B59050D1100B040 type is suitable for measuring water levels and can be operated within a temperature range of between +10 °C and +65 °C. The B59050D1120B040 variant is designed for liquids with a thermal conductivity of $\lambda_{th} > 0.12$ W/mK such as oil or fuel. The permissible temperature range in this case is between -25 °C and +50 °C.

To prevent overheating, the PTC elements should be operated at a voltage <18 V. The tip of the PTC element can emit different thermal losses. The transition from liquid to air and vice-versa causes these losses to change very quickly, and as a result, the resistance of the PTC element. This allows the device to record very simply and exactly whenever a liquid goes above or below a certain level.

In contrast to level measurement with mechanical contacts, PTC-based systems operate with no moving parts. Moreover, complex electronics such as those required by ultrasonic or optical systems are unnecessary.

You can download the text of this press release and the related images from www.epcos.com/tradepress
Further information on this topic can be found at www.epcos.com/ptc

Please forward reader inquiries to EPCOS AG, Fax +49 89 636-22471, marketing.communications@epcos.com

Contacts for regional media:	Europe, NAFTA Christoph Jehle EPCOS AG Munich/GERMANY Phone +49 89 636-24 615 Fax +49 89 636-22 741 christoph.jehle@epcos.com www.epcos.com	Asia Angelia Liew EPCOS PTE LTD SINGAPORE Phone +65 6840-6488 Fax +65 6744-6992 angelia.liew@epcos.com www.epcos.com.sg	South America Candido Dall'Agnol EPCOS do Brasil Ltda. São Paulo/BRAZIL Phone +55 11 3817-3435 Fax +55 11 3817-3447 candido.dallagnol@epcos.com www.epcos.com
------------------------------	---	---	---