

November 11, 2011

Notification of changes Lead-free outer terminals in SMD NTC thermistors

The terminals of the EPCOS SMD NTC thermistors of the B57* series consist of metal and glass frit. The glass frit acts as an adhesive medium to the NTC ceramic, which melts at the burn-in of the electrode. It previously contained lead oxide (~0.25%) in order to reduce the burn-in temperature. It has now been converted to a completely lead-free composition.

The SMD NTC thermistors were already RoHS-compliant because the exception 7.c permits the use of non-metallic lead compounds in ceramic components. However, our aim is to manufacture EPCOS products that are lead-free (<< 0.1% Pb) as far as possible.

Affected products

For purposes of differentiation and tracing the changes, the suffix V06 will be automatically added to the previous ordering code. For customers, however, the code will continue to contain 15 digits as before, and the ordering process also remains unchanged. Only the labels on the packaging as well as the delivery documents will display the 18-digit ordering code with suffix.

Previous ordering code	Ordering code with suffix
B57211V2472*	B57211V2472*V06
B57261V2223*	B57261V2223*V06
B57261V2333*	B57261V2333*V06
B57311V2101*	B57311V2101*V06
B57311V2151*	B57311V2151*V06
B57311V2470*	B57311V2470*V06
B57323V2473*	B57323V2473*V06
B57351V2103*	B57351V2103*V06
B57351V5473*	B57351V5473*V06
B57352V2103*	B57352V2103*V06
B57354V2103*	B57354V2103*V06
B57442V5103*	B57442V5103*V06
B57619C5103*	B57619C5103*V06
B57620C2103*	B57620C2103*V06
B57620C5102*	B57620C5102*V06
B57620C5103*	B57620C5103*V06
B57621C5102*	B57621C5102*V06
B57621C5103*	B57621C5103*V06
B57621C5153*	B57621C5153*V06
B57621C5472*	B57621C5472*V06

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Planned introduction

Release samples of affected types are now available.
The conversion will take place starting in **February 2012**.

Quality

The specified properties of the affected SMD NTC thermistors, especially the solder properties, remain unchanged by the lead-free terminals. The SMD NTC thermistors permit lead-free soldering.

The manufacture of SMD NTC thermistors with lead-free terminals is a standard process and is implemented with existing equipment. The changed types are released in line with the requirements of ISO/TS 16949.

Enclosure Notification of changes (PCN)

Contact Volker Wischnat, PPD ML PM, Deutschlandsberg

Customers are asked to address inquiries directly to their sales contacts.



**Product / Process Change Notification
Produkt-/ Prozess-Änderungsmitteilung**

1. ID No. / ID-Nr.: PPD 21/T116		2. Date of announcement / Datum der Ankündigung: November 11, 2011	
3. Type / Produktgruppe: SMD NTC thermistors/ SMD NTC- Thermistoren	Old ordering code / Alte Bestell-Nr.: B57211V2472* B57261V2223* B57261V2333* B57311V2101* B57311V2151* B57311V2470* B57323V2473* B57351V2103* B57351V5473* B57352V2103* B57354V2103* B57442V5103* B57619C5103* B57620C2103* B57620C5102* B57620C5103* B57621C5102* B57621C5103* B57621C5153* B57621C5472*	New ordering code / Neue Bestell-Nr.: No change / Keine Änderung	Customer part number / Kundensachnummer:



4. Description of change / Beschreibung der Änderung:

The terminals of the EPCOS SMD NTC thermistors of the B57* series consist of metal and glass frit. The glass frit acts as an adhesive medium to the NTC ceramic, which melts at the burn-in of the electrode. It previously contained lead oxide (~0.25%) in order to reduce the burn-in temperature. It has now been converted to a completely lead-free composition.

The SMD NTC thermistors were already RoHS-compliant because the exception 7.c permits the use of non-metallic lead compounds in ceramic components. However, we endeavor to manufacture EPCOS products to be lead-free (<< 0.1% Pb) as far as possible.

The specified properties of the affected SMD NTC thermistors, especially the solder properties, remain unchanged by the lead-free terminals. The SMD NTC thermistors permit lead-free soldering.

For purposes of differentiation and tracing the changes, the suffix V06 will be automatically added to the previous ordering code. For customers, however, the code will continue to contain 15 digits as before, and the ordering process also remains unchanged. Only the labels on the packaging as well as the delivery documents will display the 18-digit ordering code with suffix.

Example: Previous ordering code B57211V2472J060, after the conversion B57211V2472J060V6. /

Die Terminierung der EPCOS SMD NTC-Thermistoren der Serie B57* besteht aus Metall und einer Glasfritte. Diese Glasfritte dient als Haftvermittler zur NTC-Keramik, die beim Einbrennen der Elektrode aufschmilzt. Bisher enthielt die Glasfritte Bleioxid (~0,25%) um die Einbrenntemperatur herabzusetzen.

Die Glasfritte wird nun für die oben angegebenen Typen auf eine völlig bleifreie Rezeptur umgestellt.

Die SMD NTC-Thermistoren waren bereits RoHS-konform, weil die Ausnahme 7.c die Verwendung von nichtmetallischen Bleiverbindungen in keramischen Bauelementen erlaubt. Wir sind jedoch bestrebt, unsere Produkte möglichst bleifrei (<< 0,1% Pb) herzustellen.

Die spezifizierten Eigenschaften der NTC-Thermistoren, vor allem die Löteigenschaften ändern sich durch die bleifreie Terminierung nicht. Die SMD NTC Thermistoren sind bleifrei lötlbar.

Zur Unterscheidung und Rückverfolgbarkeit der Änderung wird der Bestellsuffix V06 automatisch zur bisherigen Bestellnummer hinzugefügt. Für Kunden bleiben die Bestellnummern jedoch unverändert 15-stellig, auch der Bestellprozess ändert sich nicht. Lediglich die Etiketten der Verpackung sowie die Lieferpapiere zeigen die 18-stellige Bestellnummer mit Zusatz an.

Beispiel Bestellnummer bisher B57211V2472J060, nach Umstellung B57211V2472J060V6.

5. Effect on the product or for customers (quality, specification, lead time) /

Auswirkung auf das Produkt oder für den Kunden (Qualität, Spezifikation, Lieferzeiten):

The specified properties of the NTC remain unchanged by the lead-free terminals. The SMD NTC thermistors permit lead-free soldering./

Die spezifizierten Eigenschaften der NTC-Thermistoren ändern sich durch die bleifreie Terminierung nicht. Die SMD NTC-Thermistoren sind bleifrei lötlbar.

6. Quality assurance measures / Maßnahmen zur Qualitätssicherung:

The changed types are released in line with the requirements of ISO/TS 16949. /

Die Freigabe der geänderten Typen erfolgt nach den Anforderungen der ISO/TS 16949.



7. Scheduled date of introduction / Geplante Einführung: February 15, 2012

8. Customer feedback / Rückmeldung vom Kunden:

If EPCOS does not receive notification to the contrary within a period of 10 weeks, EPCOS assumes that the customer agrees to the change. For an interim period we cannot rule out that old as well as new products will be shipped.

Falls EPCOS innerhalb von 10 Wochen keine gegenteilige Mitteilung erhält, geht EPCOS davon aus, dass die geplante Änderung vom Kunden akzeptiert ist. Innerhalb einer Übergangszeit kann es vorkommen, dass sowohl alte wie auch neue Ware geliefert wird.

Quality Management:

Name: Dr. W. Pint

Signature

sgd. Pint

Product Marketing:

Tel: +43 3462 800 2459

Fax: +43 3462 800 2872

E-mail: volker.wischnat@epcos.com

Name: Volker Wischnat

Signature

sgd. Wischnat

Customer acknowledgement

Bestätigung durch den Kunden

Signature