

January 22, 2016

## Product change

### Coating material and dimensions of EPCOS PTC thermistors

EPCOS PTC thermistors will in future be coated with a new silicone lacquer. As the previous supplier has discontinued the previously used material, a new supplier has been selected. In addition, the dimensions of a few of the affected thermistors were also slightly changed.

**Affected products:** See Annex

**Planned introduction:** May 2, 2016  
From 2017, only thermistors with the new coating will be shipped.

The color of the lacquer will be a slightly darker blue; the laser marking will be a darker gray in order to improve legibility. In addition to these changes, the appearance, function, quality, reliability, lead time and processability of the affected thermistors will remain unchanged.

All relevant product approvals according to UL, IECQ and VDE will continue to be valid after this change. The new material is flame retardant to UL94-V0 and is RoHS-compatible.

The coating material from the new supplier has already been used for several years in the production of similar EPCOS PTC thermistors.

The new material has been released in our plant in Zhuhai, China, according to ISO/TS 16949. Process control and outgoing inspections will be intensified during the ramp-up phase.

**Enclosure** PCN (ID No. PPD32/T120)  
Detailed overview of affected ordering codes

**Contact** Dr. Stefan Benkhof, PPD PTC PM, Munich

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

## Product / Process Change Notification

<b>1. ID No.:</b> PPD32/T120		<b>2. Date of announcement:</b> January 22, 2016	
<b>3. Product / product group:</b> Selected PTC thermistors (see annex).	<b>Old ordering code:</b> See annex	<b>New ordering code:</b> No change	<b>Customer part number:</b>
<b>4. Description of change:</b> A new supplier for the coating material (silicone laquer) has been selected. Reason for change: Our existing supplier has discontinued the coating material. The coating process itself remains unchanged. Additionally, for very few of the affected materials we have slightly increased the specification for the mechanical dimensions (for details see Annex).			
<b>5. Effect on the product or for the customer (benefit, quality, specification, lead time):</b> Slightly different visual appearance of the coating (slightly darker blue). Color of laser marking (where applicable) will change from light gray to a darker gray with improved legibility. Besides the described changes, no other change in appearance, function, quality, reliability, lead time or processability. All related product approvals according to UL, IECQ and VDE (as currently specified) will still be valid after the change. The new material is flame retardant to UL94-V0 and is RoHS-compatible.			
<b>6. Quality assurance measures / risk assessment:</b> The coating material from the new supplier has already been used in the production of similar EPCOS PTC thermistors. Release of the new materials in our factory in Zhuhai according to ISO/TS 16949. Intensified process control and outgoing inspection during the ramp-up phase.			
<b>7. Scheduled date of change:</b> First shipments with the new coating on May 2, 2016. From 2017 onwards, only parts with the new coating will be produced. We therefore need to receive your release of this PCN in November 2016 at the latest.			
<b>8. Estimated date of first delivery of changed product:</b> May 2, 2016 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.			
Quality Management		Signature	
Name Markus Weiglhofer		signed Weiglhofer	
Product Marketing		Signature	
Name Dr. Stefan Benkhof		signed Benkhof	
Tel. +49 89 54020 2970			
Email stefan.benkhof@epcos.com			

<b>Customer feedback</b>	
Customer acknowledgement	Signature

**Coating material and dimensions of EPCOS PTC thermistors**

Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59001J1130B040						
B59001J1140B040						
B59001U1080B070						
B59001U1090B070						
B59001U1170B070						
B59002J1130B040						
B59003J1135B040						
B59005J1135B040						
B59008U1120B053						
B59011C1040A070						
B59020S1120B054						
B59023U1120B054						
B59028C1080B053						
B59030C1120B070	1.7			2.5		
B59034S1060B070						
B59034S1070B070						
B59034S1080B070						
B59034S1090B070						
B59034S1100B070						
B59034S1110B070						
B59034S1120B070						
B59034S1140B070						
B59034S1145B070						
B59034S1150B070						
B59034S1155B070						
B59034S1160B070						
B59034S1170B070						
B59034S1180B070						
B59042U1155B070						
B59051U1150B070						
B59051U1160B070						
B59063S1080B070						
B59065S1120B054						
B59067U1140B070						
B59069S0120B062	3.7		3.2	4.5		3.5
B59073S0120B054	5.0			5.5		
B59076S1120B054						
B59078U1145B070						
B59078U1150B070						
B59078U1155B070						
B59082U1160B070						
B59084S1120B054						
B59086U1080B053						
B59087U1120B040						
B59087U1120B070						
B59091S1130B070						
B59092S1120B054						
B59092U1110B070						
B59094U1140B070						
B59095U1120B070						
B59095U1145B070						
B59098U1170B070						
B59099U1080B070						
B59099U1100B070						

All listed ordering codes are affected by the coating change.

Cell empty: no change of dimensions.

**Coating material and dimensions of EPCOS PTC thermistors**

Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59100C0010A070						
B59100C0080A054						
B59100C0080A070						
B59100C0090A070						
B59100C0100A051						
B59100C0100A070						
B59100C0110A070						
B59100C0120A070						
B59100C0120B070						
B59100C0130A070						
B59100C0130B070						
B59100C0140A070						
B59100C0140B070						
B59100C0150A151						
B59100M1060A070						
B59100M1070A070						
B59100M1080A070						
B59100M1090A070						
B59100M1100A070						
B59100M1100B070						
B59100M1110A070						
B59100M1120A070						
B59100M1130A070						
B59100M1140A070						
B59100M1145A070						
B59100M1150A070						
B59100M1155A070						
B59100M1160A070						
B59100M1170A070						
B59100M1180A070						
B59101S1155B070						
B59101U1145B070						
B59102S1160B070						
B59115S1100B054			4.0			5.0
B59118C1080A070						
B59118C1080B051						
B59119C1080A054						
B59119C1080A070						
B59120U1140B070						
B59120U1160B070						
B59121U1160B070						
B59122U1160B070						
B59123U1130B070						
B59124U1120B070						
B59130S1120A054						
B59130U1080B070						
B59130U1090B070						
B59130U1100B070						
B59130U1110B070						
B59130U1120B070						
B59130U1130B070						
B59130U1140B070						
B59130U1150B070						
B59130U1155B070						

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Cell empty: no change of dimensions.

**Coating material and dimensions of EPCOS PTC thermistors**

Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59130U1160B070						
B59130U1170B070						
B59130U1180B070						
B59132U1120B070						
B59133U1110B070						
B59135U1140B070						
B59140U1130B070						
B59140U1155B070						
B59141U1130B070						
B59142U0120B053						
B59148U0120B057						
B59148U1120B070						
B59148U1130B070						
B59148U1145B070						
B59148U1155B070						
B59148U1170B070						
B59150U1140B040						
B59151U1110B070						
B59151U1130B070						
B59151U1140B070						
B59151U1160B070						
B59151U1180B070						
B59171U0120B070						
B59173C1130A151						
B59176S1100B054						
B59185S1120B054						
B59204U0120B053						
B59204U0160B053						
B59220S1120B054			4.0			5.0
B59228U0120B070						
B59235U1120B051						
B59241U0120B051						
B59300M1070B140						
B59300M1080B140						
B59300M1090A070						
B59300M1090B140						
B59300M1100A070						
B59300M1100B140						
B59300M1110A070						
B59300M1110B140						
B59300M1120A070						
B59300M1120B011						
B59300M1120B140						
B59300M1130A070						
B59300M1130B140						
B59300M1140A070						
B59300M1140B140						
B59300M1145A070						
B59300M1145B140						
B59300M1150A070						
B59300M1150B140						
B59300M1155A070						
B59300M1155B140						
B59300M1160A070						

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**Coating material and dimensions of EPCOS PTC thermistors**

Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59300M1160B140						
B59300M1170B140						
B59300M1180A070						
B59300M1180B140						
B59300M1190A070						
B59303M1110B070						
B59303M1120B070						
B59310U1130B070						
B59310U1140B070						
B59310U1150B070						
B59310U1160B070						
B59310U1180B070						
B59311U1110B070						
B59312U1130B070						
B59312U1140B070						
B59312U1150B070						
B59312U1160B070						
B59313U1130B070						
B59313U1140B070						
B59313U1150B070						
B59313U1160B070						
B59313U1180B070						
B59314U1140B070						
B59314U1160B070						
B59314U1180B070						
B59351U1160B070						
B59407B0030A040						
B59412C1130B070	15.0	19.0	7.5	16.0	20.5	8.0
B59451C1130A040						
B59451C1130B070	15.0	19.0	7.5	16.0	20.5	8.0
B59750C0120A070	12.5	16.5	5.0	13.0	18.0	5.5
B59750C0120B051	12.5	16.5	5.0	13.0	18.0	5.5
B59750C1130B070	12.5	16.5		13.0	17.0	
B59751C0120A070	12.5	16.5	7.0	13.0	18.0	7.5
B59751U0120A040						
B59774C0115A070						
B59810C0120A070						
B59810C0130A070						
B59810C0160A070						
B59830C0120A070						
B59830C0130A040						
B59830C0130A070						
B59830C0160A070						
B59840C0080A054						
B59840C0080A070						
B59840C0120A070						
B59840C0130A070						
B59840C0160A070						
B59841C0135A040						
B59841C0135A070						
B59850C0080A070						
B59850C0120A051						
B59850C0120A070						
B59850C0120A570						

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Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59850C0120B054						
B59850C0130A051						
B59850C0130A070						
B59850C0160A070						
B59860C0080A070						
B59860C0120A051						
B59860C0120A070						
B59860C0120A554						
B59860C0120A570						
B59860C0130A040						
B59860C0130A054						
B59860C0130A070						
B59860C0160A070						
B59861C0135A051						
B59861C1120A051						
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B59880C0130A070						
B59880C0160A070						
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B59883C0120A051						
B59883C0120A070						
B59883C0120A554						
B59883C0120A570						
B59883C0120B070						
B59884C0012A051						
B59884C0120A054						
B59884C0120A055						
B59884C0120A070						

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	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59885C0120A051						
B59885C0120A054						
B59885C0120A070						
B59886C0120A051						
B59886C0120A070						
B59890C0080A054						
B59890C0080A070						
B59890C0120A051						
B59890C0120A054						
B59890C0120A070						
B59890C0120A151						
B59890C0160A070						
B59890S1120B154						
B59891C0135A053						
B59891C0135A070						
B59910C0120A070						
B59910C0130A070						
B59915C0120A070						
B59915C0160A070						
B59930C0120A070						
B59930C0130A070						
B59930C0160A051						
B59930C0160A070						
B59935C0120A051						
B59935C0120A070						
B59940C0120A070						
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B59965C0160A051						
B59965C0160A070						
B59970C0080A051						
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B59970C0120A051						
B59970C0120A070						
B59970C0130A070						
B59970C0160A051						
B59970C0160A070						
B59975C0120A051						

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Affected products

Ordering code	OLD			NEW		
	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)	W <sub>max</sub> (mm)	H <sub>max</sub> (mm)	Th <sub>max</sub> (mm)
B59975C0120A070						
B59975C0160A070						
B59980C0080A051						
B59980C0080A070						
B59980C0120A051						
B59980C0120A053	5.8			6.5		
B59980C0120A070						
B59980C0130A070						
B59980C0160A070						
B59985C0120A051						
B59985C0120A070						
B59985C0160A051						
B59985C0160A070						
B59990C0080A051						
B59990C0080A070						
B59990C0120A051						
B59990C0120A054						
B59990C0120A070						
B59990C0160A051						
B59990C0160A070						
B59995C0120A051						
B59995C0120A070						
B59995C0120B054						
B59995C0160A051						
B59995C0160A070						

All listed ordering codes are affected by the coating change.  
 Cell empty: no change of dimensions.