

August 6, 2010

Notification of changes

Second line introduction for transponder coils B82450A*

In order to increase our capacity and reduce lead times for transponder coils, EPCOS will introduce a complete second line, copy of the existing one in Szombathely/ Hungary.

This change has no effect on the quality and reliability of the products, or on their assured electrical and mechanical properties.

Planned introduction **January 2011**

Enclosure Notification of changes (PCN)

Contact Leopoldo Bertossi, MAG IN PM, Munich

Customers should kindly address inquiries directly to their sales contacts.



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

1. ID No. / ID-Nr.: MAG-192180610		2. Date of announcement / Datum der Ankündigung: August 6, 2010	
3. Type / Produktgruppe: B82450A****A*	Old ordering code / Alte Bestell-Nr.: B82450A****A*	New ordering code / Neue Bestell-Nr.: B82450A****A*	Customer part number / Kundensachnummer:
4. Description of change / Beschreibung der Änderung: <p>In order to increase our capacity and reduce lead times for transponder coils, EPCOS will introduce a complete second line, copy of the existing one in Szombathely / Hungary.</p> <p>EPCOS erweitert am Standort Szombathely/ Ungarn die Fertigungskapazitäten bei Transponderspulen der Serie B82450A* durch eine zweite Fertigungslinie und verkürzt damit die Lieferzeiten. Die neue Fertigungslinie ist mit der an diesem Standort bereits vorhandenen identisch.</p>			
5. Effect on the product or for customers (quality, specification, lead time) / Auswirkung auf das Produkt oder für den Kunden (Qualität, Spezifikation, Lieferzeiten): <p>This change has no effect on the quality and reliability of the products, or on their assured electrical and mechanical properties.</p> <p>Diese Maßnahme hat keinen Einfluss auf die Qualität und die Zuverlässigkeit der Produkte sowie die elektrischen und mechanischen Eigenschaften.</p>			
6. Quality assurance measures / Maßnahmen zur Qualitätssicherung: <p>EPCOS will run an AEC-Q200 qualification. See attached qualification test plan. A presentation with details of schedule and comparison with the existing line is available upon request.</p> <p>EPCOS wird eine Qualifikation gemäß AEC-Q200 durchführen. Siehe den beigefügte Qualifikationstest-Plan. Eine Darstellung mit Details des Zeitplanes und ein Vergleich mit der vorhandenenen Linie ist auf Antrag erhältlich.</p>			
7. Scheduled date of introduction / Geplante Einführung: January 2011			
8. Customer feedback / Rückmeldung vom Kunden: <p>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.</p> <p>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.</p>			
Quality Management: Name: Wolfgang Woitsch, 18.06.10		Signature sgd. Woitsch	
Product Marketing: Tel: +49 89 636-26201 Fax: +49 89 636-22575 E-mail: leopoldo.bertossi@epcos.com Name: Leopoldo Bertossi		Signature sgd. Leopoldo Bertossi June, 16th 2010	
Customer acknowledgement Bestätigung durch den Kunden		Signature	

Qualification Test Plan

Part Number:	B82450-A1004-A000 (1 mH), B82450-A2364-A000 (2,36 mH), B82450-A7004-A000 (7 mH)
Description:	Transponder 11mm - Second line qualification
Supplier:	Epcos AG
General Specification:	AEC-Q200, rev.C + customer requirements
Supplier Manufacturing Site:	Szombathely, Hungary

Item	Test	Test conditions	Lots	Parts each lot	Estimated Start	Estimated Comp	Interim Report acc. AEC-Q200 (1000h/1000cycles)	S.S	Additional Requirements
1	Pre- and Post Stress Electrical Test	L, R _{DC}	1	all parts					
2	<i>not used</i>	-	-	-					
3	High Temperature Expose	T _{max} / 0A / 2000h /precond.: 100TC	1	77+10					
4	Temperature Cycling	T _{min} /15min...T _{max} /15min, 1000 cycles, transfer time < 1min	1	77+10					transfer time < 10 sek.
5	<i>not used</i>	-	-	-					
6	Moisture Resistance	25°C..65°C /90..98% r.h., 24h/cycle, 10cycles, unpowered	1	77					
7	Biased Humidity	+85°C / 85% r.h. / 0A / 2000h /precond.: 100TC	1	77+10					
8	Operational Life	85°C / I _k / 2000h	1	77					
9	External Visual	Legible marking, good workmanship, no visual damage	1	all parts					
10	Physical Dimensions	Criteria according to Drawing	1	30					
11	-								
12	Resistance to Solvents	with OKEM Clean, aqueous wash chemical or equivalent	1	5					
13	Mechanical Schock	Half-sine, duration 0.2ms, Peak value 3000g's, 10 bumps in each of 6 directions	1	30+10					
14	Vibration	Test from 10...2000Hz:10g, 24h each of 3 axis	1						
15	Resistance to Solder Heat	260°C/3cycles	1	30					
16	Thermal Schock	T _{min} /15min..T _{max} /15min, 300cycles, transfer time:20s	1	30					not applicable, see test goup 4
17	ESD	HBM, voltage level 6kV - 25kV	1	15					
18	Solderability	Aging: +155°C/4hrs, 245°C/3s, J-STD002B	1	15					
	Solderability	Aging: Steam aging /8hrs, 245°C/3s, J-STD002B		15					
	Solderability	Res. to dissolution of metallization->Aging: Steam aging/8hrs, 260°C/2x5s, max 5%dewetting		15					
19	Electrical Characterization	SMT: L, min/max/standard deviation-> StepA: +25°C	1	30					
		SMT: L, min/max/standard deviation-> StepB:T _{min}		30					
		SMT: L, min/max/standard deviation-> StepC:T _{max}		30					
20	Flammability	10s flame-time -> no flame after 10s, no glowing after 30s	-	-					
21	Board Flex	SMT: Deflection min. 2mm, duration 60s	1	30					
22	Terminal Strength	Appendix 1, Note:1,8kg / 60s, in each of 3 directions	1	30					

additional tests									
	Low temperature exposure	-40°C, 0A, 2000h	1	77					
	Whisker	a) Storage 60°C/93%r.h./6months b) 500 Temperature Cycles, Storage 6 months, 500 Temperature Cycles c) Storage at room temperature, 6 months	-	-					
	Drop Test	1000x1m, random drop, soldered in keyfob-jig (EPCOS Test conditions)	-	-					Aging: 24h@-40°C, 24h @ + 125°C

With tests 3 and 7 preconditioning has to be carried out

Characterisation of 10 pcs additive parts at Tests 3+4+7+14

before start visual examination

All test specimens of group 3,4,6,7,8,13,14,15,16 will be reflowed by 3 cycles of the "260°C"

16.06.2010

SZ MAG IN SMD PD