

14.11.2014

## Produktänderung Neue Bestempelung bei SAW-Filtern

Diese UPtoDATE ersetzt die UPtoDATE 140131SAW1g und PCN M244 vom 31. Januar 2014. Aufgrund von Kundenwünschen wird die Nachverfolgbarkeit unten aufgeführter EPCOS SAW-Filter nochmals angepasst.

Künftig wird die Beschriftung auf der Oberseite von Produkten in CSSP-Technologie durch einen neuen Code ersetzt. Da an einem Tag mehr als ein Los eines Typs gefertigt werden kann, ist eine genaue Bestimmung des Bestückloses anhand des bisher genutzten Datums-Codes nicht möglich. Die neue Bestempelung beinhaltet daher in der unteren Reihe einen 3-stelligen Base47 Code. Dieser verschlüsselt die letzten fünf Stellen der kompletten 7-stelligen Assembly Losnummer (ohne A am Anfang) und erlaubt so die Nachverfolgung eines Produktes bis auf ein einzelnes Los genau. Zudem kodiert in der oberen Reihe ein 3-stelliger BASE32 Code alle Ziffern des Produktnamens (Details siehe Anhang 1 und 2).

### Betroffene Produkte

| Bestellnummer                           |
|---|
| B39*B76*                                |
| B39*B77*                                |
| B39*B78*                                |
| B39*B79*                                |
| B39*B80*                                |
| B39*B83*                                |
| B39*B84*                                |
| B39*B85*                                |
| B39*B86*                                |
| B39*B87* ohne B39*B8753* und B39*B8755* |
| B39*B88*                                |
| B39*B90*                                |
| B39*B91*                                |
| B39*B93*                                |
| B39*B94*                                |
| B39*B95*                                |
| B39*B96*                                |
| B39*B97*                                |
| B39*B98*                                |
| B39*B99*                                |

Geplante Einführung: 18. April 2015

**EPCOS AG** · A TDK Group Company

Besucher: St.-Martin-Straße 53, 81669 München · Post: PF 80 17 09, 81617 München, Deutschland

Sitz der Gesellschaft: München · Registergericht: Amtsgericht München HRB 127250

Vorsitzender des Aufsichtsrats: Dr. Werner Faber

Vorstand: Joachim Zichlarz, Vorsitzender · Joachim Thiele · Dr. Norbert Hess · Christian Block

www.epcos.com




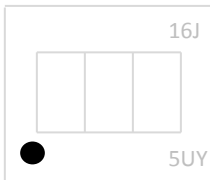



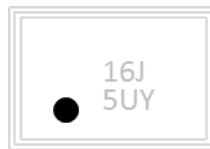
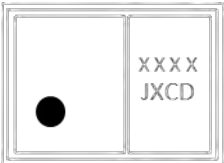
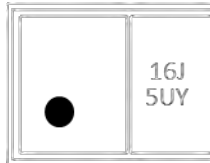
**SAW-Komponenten,  
Module**

Intern / Extern

141114SAW1g

14.11.2014

**Bisherige und neue Bestempelung im Vergleich**

| Verpackungstechnologie | Bisherige Bestempelung  | Neue Bestempelung   |
|------------------------|---|---|
| CSSPlus DPX            |    |    |
| CSSPlus BAW DPX        |    |    |
| CSSP3 GT               |   |   |
| CSSP3 Cu               |  |  |
| CSSP3 BAW Hybrid       |  |  |

Die Einführung der neuen Bestempelung hat keinen Einfluss auf Produktspezifikationen, Qualität, Bestellnummern oder Lieferzeiten. Es sind keine zusätzlichen qualitätssichernden Maßnahmen erforderlich, da keine Änderung der Parameter des Markierungsprozesses erfolgt.

**Anlage** PCN

Anhang 1: Example of new marking

Anhang 2: Explanation of new marking code

**Kontakt** Thomas Friedrich, SAW CEL PM CA, München**Kunden wenden sich bei Fragen bitte direkt an ihren Ansprechpartner im Vertrieb.**



**Product / Process Change Notification**

|   |   |   |                              |
|---|---|---|------------------------------|
| <b>1. ID No.:</b> M274  |   | <b>2. Date of announcement:</b> November 14, 2014 |                              |
| <b>3. Product / product group:</b><br>EPCOS SAW filters   | <b>Old ordering code:</b><br>B39*B76*,<br>B39*B77*,<br>B39*B78*,<br>B39*B79*,<br>B39*B80*,<br>B39*B83*,<br>B39*B84*,<br>B39*B85*,<br>B39*B86*,<br>B39*B87* except<br>B39*B8753* and<br>B39*B8755*,<br>B39*B88*,<br>B39*B90*,<br>B39*B91*,<br>B39*B93*,<br>B39*B94*,<br>B39*B95*,<br>B39*B96*,<br>B39*B97*,<br>B39*B98*,<br>B39*B99* | <b>New ordering code:</b><br>No change            | <b>Customer part number:</b> |
| <b>4. Description of change:</b><br>For better traceability of EPCOS SAW filters, the marking on top of all products in CSSP technology will be replaced by coded information. More than one lot of a specific type can be produced in a single day. Accordingly, the date code used up to now is insufficient to identify an individual assembly lot. The new marking format includes a 3-digit BASE47 code in the bottom row encoding the last five digits of the complete 7-digit assembly lot number (without the A in front), which allow the product to be traced down to a single lot. In addition, a 3-digit BASE32 code in the top row encodes all digits of the device name (for details, see Annex 1 and 2). |   |   |                              |
| <b>5. Effect on the product or for the customer (benefit, quality, specification, lead time):</b><br>The implementation of the new marking format will have no effect on the specifications, quality, ordering codes or delivery time of the products.  |   |   |                              |
| <b>6. Quality assurance measures / risk assessment:</b><br>No additional quality assurance measures are needed, as the marking process parameters remain unchanged.   |   |   |                              |
| <b>7. Scheduled date of change:</b> April 18, 2015  |   |   |                              |
| <b>8. Estimated date of first delivery of changed product:</b> April 18, 2015<br>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.   |   |   |                              |
| <b>9. Identification of changed product (first date code / marking):</b><br>New marking   |   |   |                              |



|  |                                   |
|--|-----------------------------------|
| Quality Management<br>Name Franz Schoenegger   | Signature<br>signed F.Schoenegger |
| Product Marketing<br>Name Thomas Friedrich<br>Tel. +49 89 54020 2738<br>Email thomas.friedrich@epcos.com | Signature<br>signed Th.Friedrich  |

|                              |           |
|------------------------------|-----------|
| <b>10. Customer feedback</b> |           |
| Customer acknowledgement     | Signature |

Annex 1 to UPtoDATE 141114SAW1 of November 14, 2014 /  
New marking for SAW filters

Example of new marking / series production



**Annex 2 to UPtoDATE 141114SAW1 of November 14, 2014 /  
New marking for SAW filters**

**A) Explanation of new marking code for all non-AE filters and duplexers with CSSP package technology starting with marking from February 1, 2015**

| <b>Adopted Base32 code<br/>for device name</b> |             |                        |             |
|--|-------------|------------------------|-------------|
| Decimal position value                         | Base32 code | Decimal position value | Base32 code |
| 0  | 0           | 16                     | G           |
| 1  | 1           | 17                     | H           |
| 2  | 2           | 18                     | J           |
| 3  | 3           | 19                     | K           |
| 4  | 4           | 20                     | M           |
| 5  | 5           | 21                     | N           |
| 6  | 6           | 22                     | P           |
| 7  | 7           | 23                     | Q           |
| 8  | 8           | 24                     | R           |
| 9  | 9           | 25                     | S           |
| 10   | A           | 26                     | T           |
| 11   | B           | 27                     | V           |
| 12   | C           | 28                     | W           |
| 13   | D           | 29                     | X           |
| 14   | E           | 30                     | Y           |
| 15   | F           | 31                     | Z           |

| <b>Adopted Base47 code<br/>for last five digits of lot number</b> |             |                        |             |
|---|-------------|------------------------|-------------|
| Decimal position value  | Base47 code | Decimal position value | Base47 code |
| 0   | 0           | 24                     | R           |
| 1   | 1           | 25                     | S           |
| 2   | 2           | 26                     | T           |
| 3   | 3           | 27                     | U           |
| 4   | 4           | 28                     | V           |
| 5   | 5           | 29                     | W           |
| 6   | 6           | 30                     | X           |
| 7   | 7           | 31                     | Y           |
| 8   | 8           | 32                     | Z           |
| 9   | 9           | 33                     | b           |
| 10  | A           | 34                     | d           |
| 11  | B           | 35                     | f           |
| 12  | C           | 36                     | h           |
| 13  | D           | 37                     | n           |
| 14  | E           | 38                     | r           |
| 15  | F           | 39                     | t           |
| 16  | G           | 40                     | v           |
| 17  | H           | 41                     | \           |
| 18  | J           | 42                     | ?           |
| 19  | K           | 43                     | {           |
| 20  | L           | 44                     | }           |
| 21  | M           | 45                     | <           |
| 22  | N           | 46                     | >           |
| 23  | P           |                        |             |

## B) Examples of encoding and decoding

| <b>Device name encoding example B1234:</b>  | <i>In adopted Base32 code</i> |
|---|-------------------------------|
| <i>Without B in decimal code: 1234</i>  |                               |
| 1234 : 32 = 38 with remainder 18  | = J                           |
| 38 : 32 = 1 with remainder 6  | = 6                           |
| 1 : 32 = 0 with remainder 1   | = 1                           |
| <i>(Combine the encoded remainders to form new device name in special Base32 code starting with the last remainder first)</i> | <b>1 6 J</b>                  |
| <br>  |                               |
| <b>Device name decoding example:</b>  |                               |
| <i>Device name in special Base32 code: 16J</i>  | <i>In decimal code:</i>       |
| $1 \times 32^2 + 6 \times 32^1 + 18 (=J) \times 32^0 =$   | <b>1234</b>                   |

| <b>Last 5 digits of lot number encoding example:</b>   | <i>In adopted Base47 code</i> |
|--|-------------------------------|
| <i>in decimal code: 12345</i>  |                               |
| 12345 : 47 = 262 with remainder 31   | = Y                           |
| 262 : 47 = 5 with remainder 27   | = U                           |
| 5 : 47 = 0 with remainder 5  | = 5                           |
| <i>(Combine the encoded remainders to form a new lot number in special Base47 code starting with the last remainder first)</i> | <b>5 U Y</b>                  |
| <br>   |                               |
| <b>Lot number decoding example:</b>  |                               |
| <i>Lot number in special Base47 code: 5UY</i>  | <i>In decimal code:</i>       |
| $5 \times 47^2 + 27 (=U) \times 47^1 + 31 (=Y) \times 47^0 =$  | <b>12345</b>                  |