

November 14, 2014

Product change New marking for SAW filters

This UPtoDATE replaces UPtoDATE 140131SAW1e and PCN M244 of January 31, 2014. In response to customer demand, EPCOS has further adapted the 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 allows 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).

Affected products

Ordering code
B39*B76*
B39*B77*
B39*B78*
B39*B79*
B39*B80*
B39*B83*
B39*B84*
B39*B85*
B39*B86*
B39*B87* without B39*B8753* and B39*B8755*
B39*B88*
B39*B90*
B39*B91*
B39*B93*
B39*B94*
B39*B95*
B39*B96*
B39*B97*
B39*B98*
B39*B99*

Scheduled date of introduction: April 18, 2015

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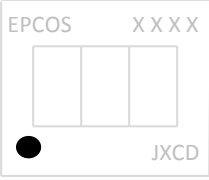
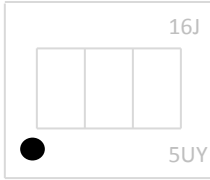




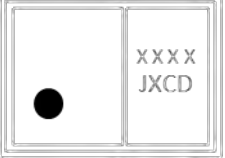

**SAW Components,
Modules**

Internal / External

141114SAW1e

Novmeber 14, 2014

Comparison of new and previous markings

Package technology	Previous marking	New marking
CSSPlus DPX		
CSSPlus BAW DPX		
CSSP3 GT		
CSSP3 Cu		
CSSP3 BAW Hybrid		

The implementation of the new marking format will have no effect on the specifications, quality, ordering codes or delivery time of the products. No additional quality assurance measures are needed, as the marking process parameters remain unchanged.

Enclosure PCN

Annex 1: Example of new marking

Annex 2: Explanation of new marking code

Contact Thomas Friedrich, SAW CEL PM CA, Munich

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



Product / Process Change Notification

1. ID No.: M274		2. Date of announcement: November 14, 2014	
3. Product / product group: EPCOS SAW filters	Old ordering code: B39*B76*, B39*B77*, B39*B78*, B39*B79*, B39*B80*, B39*B83*, B39*B84*, B39*B85*, B39*B86*, B39*B87* except B39*B8753* and B39*B8755*, B39*B88*, B39*B90*, B39*B91*, B39*B93*, B39*B94*, B39*B95*, B39*B96*, B39*B97*, B39*B98*, B39*B99*	New ordering code: No change	Customer part number:
4. Description of change: 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).			
5. Effect on the product or for the customer (benefit, quality, specification, lead time): The implementation of the new marking format will have no effect on the specifications, quality, ordering codes or delivery time of the products.			
6. Quality assurance measures / risk assessment: No additional quality assurance measures are needed, as the marking process parameters remain unchanged.			
7. Scheduled date of change: April 18, 2015			
8. Estimated date of first delivery of changed product: April 18, 2015 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.			
9. Identification of changed product (first date code / marking): New marking			

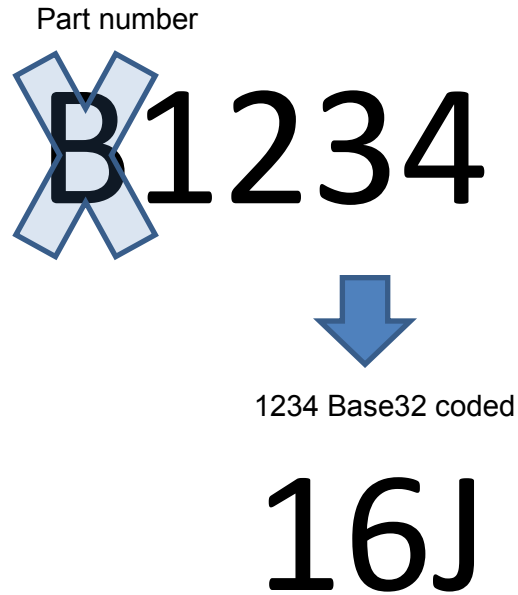


Quality Management Name Franz Schoenegger	Signature signed F.Schoenegger
Product Marketing Name Thomas Friedrich Tel. +49 89 54020 2738 Email thomas.friedrich@epcos.com	Signature signed Th.Friedrich

10. Customer feedback	
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

Adopted Base32 code for device name			
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

Adopted Base47 code for last five digits of lot number			
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

Device name encoding example B1234:	<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>	1 6 J
Device name decoding example:	
<i>Device name in special Base32 code: 16J</i>	<i>In decimal code:</i>
$1 \times 32^2 + 6 \times 32^1 + 18 (=J) \times 32^0 =$	1234

Last 5 digits of lot number encoding example:	<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>	5 U Y
Lot number decoding example:	
<i>Lot number in special Base47 code: 5UY</i>	<i>In decimal code:</i>
$5 \times 47^2 + 27 (=U) \times 47^1 + 31 (=Y) \times 47^0 =$	12345