

September 9, 2011

## Product withdrawal SAW AE filters and resonators with PROTEC passivation

As part of the continuous process optimization, PROTEC passivation technology will be discontinued at the end of 2012 for EPCOS SAW AE filters and resonators and will be replaced by the established ELPAS passivation technology.

### Affected products

Filters	
Ordering code	Type
B39431B3550U310	B3550
B39431B3750U310	B3750
B39321B3551U310	B3551
B39871B3762Z810	B3762
B39871B3570U310	B3570
B39321B3751U310	B3751
B39431B3575U310	B3575
B39431B3555U310	B3555
B39871B3773Z810	B3773
B39431B3567U310	B3567
B39871B3571U310	B3571
B39321B3576U310	B3576
B39431B3557U310	B3557
B39871B3574U310	B3574
B39421B3552U310	B3552
B39901B3772Z810	B3772
B39871B3573U310	B3573
B39431B3757U310	B3757
B39351B3559U310	B3559
B39401B4832U310	B4832
B39451B3554U310	B3554
B39311B3577U310	B3577
B39871B3572U310	B3572
B39871B3793Z810	B3793

Resonators	
Ordering code	Type
B39431R0800H210	R800
B39921R2706U310	R2706
B39431R0707U310	R707
B39321R0753U310	R753
B39801R2712U310	R2712
B39431R0708U310	R708
B39871R2711U310	R2711
B39321R0801H210	R801
B39321R0851H210	R851
B39431R0727U310	R727
B39431R2701U310	R2701
B39431R0750U310	R750
B39321R0705U310	R705
B39421R2702U310	R2702
B39431R0850H210	R850
B39421R0714U310	R714
B39301R0712U310	R712
B39301R2707U310	R2707
B39431R0732U310	R732
B39311R0771U310	R771
B39321R2704U310	R2704
B39431R0770U310	R770
B39431R0715U310	R715
B39311R2710U310	R2710
B39431R0806H210	R806
B39321R0733U310	R733
B39871R2709U310	R2709
B39301R0852H210	R852
B39311R0706U310	R706
B39301R0807H210	R807
B39421R0703U310	R703
B39401R0724U310	R724

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**SAW Components,  
Modules**  
Internal / External

110909SAW2e

September 9, 2011

Deadline for last orders:     **December 31, 2012**  
Last shipments by:           **March 29, 2013**

Substitute ELPAS types with similar properties are available for many of the affected PROTEC types from the SAW AE spectrum (see enclosure). We would be pleased to support you in the selection of suitable substitute types.

**Enclosure** ELPAS substitute types

**Contact**   Michael Pechloff, SAW AE PM, Munich

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

Parameters of discontinued SAW AE filters and resonators with PROTEC passivation							ELPAS replacement alternatives with same package size	ELPAS replacement alternatives with different package size						
Class	Ordering code	Type code	Package size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Ordering code	Ordering code	Type code	Size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Remark
Resonator	B39301R2707U310	R2707	50x50	303,825	±75						303,825			
Resonator	B39301R 807H210	R 807	35x50	303,825	±75									
Resonator	B39301R 712U310	R 712	50x50	304,300	±75						304,300			
Resonator	B39301R 852H210	R 852	35x50	304,300	±50									
Resonator	B39311R2710U310	R2710	50x50	311,063	±75									
Resonator	B39311R 706U310	R 706	50x50	314,500	-85/+100			B39311R 966H110	R966 RA17	30x30 30x30	314,900 314,000			
Resonator	B39311R 771U310	R 771	50x50	314,875	±50			B39311R 966H110	R966	30x30	314,900	±50 kHz		
Resonator	B39321R 753U310	R 753	50x50	315,000	±50			B39321R 961H110 B39321R 951U410	R961 R951	30x30 30x30	315,000	±50 kHz ±50 kHz		
Resonator	B39321R 801H210	R 801	35x50	315,000	±75		B39321R 821H210	B39321R 901H110 B39321R 961H110	R901 R961	30x30 30x30	315,000	±75 kHz ±50 kHz		
Resonator	B39321R 705U310	R 705	50x50	315,000	±85			B39321R 901H110 B39321R 961H110	R901 R961	30x30 30x30	315,000	±75 kHz ±50 kHz		
Resonator	B39321R2704U310	R2704	50x50	315,000	±100			B39321R 901H110 B39321R 961H110	R901 R961	30x30 30x30	315,000	±75 kHz ±50 kHz		
Resonator	B39321R 851H210	R 851	35x50	315,020	±50			B39321R 993H110	R993	30x30	315,020	±25 kHz		
Resonator	B39321R 733U310	R 733	50x50	315,030	±75			B39321R 993H110 B39321R 963H110	R993 R963	30x30 30x30	315,020 315,040	±25 kHz ±50 kHz		
Resonator	B39401R 724U310	R 724	50x50	403,966	±75									
Resonator	B39421R 703U310	R 703	50x50	418,000	±75									
Resonator	B39421R2702U310	R2702	50x50	418,050	±75									
Resonator	B39421R 714U310	R 714	50x50	423,220	±75						423,220			
Resonator	B39431R 715U310	R 715	50x50	433,320	±75									
Resonator	B39431R 708U310	R 708	50x50	433,420	-75/+100			B39431R 904U410	R904	30x30	433,420	±75 kHz		
Resonator	B39431R 806H210	R 806	35x50	433,420	±75			B39431R 904U410	R904	30x30	433,420	±75 kHz		
Resonator	B39431R 770U310	R 770	50x50	433,810	-65/+35									
Resonator	B39431R 800H210	R 800	35x50	433,920	±75		B39431R 820H210	B39431R 920H110 B39431R1900A310	R920 R1900	30x30 30x30	433,920 433,920	±75 kHz ±50 kHz		
Resonator	B39431R 707U310	R 707	50x50	433,920	±75			B39431R 920H110 B39431R1900A310	R920 R1900	30x30 30x30	433,920	±75 kHz ±50 kHz		
Resonator	B39431R 727U310	R 727	50x50	433,920	±75			B39431R 920H110 B39431R1900A310	R920 R1900	30x30 30x30	433,920	±75 kHz ±50 kHz		
Resonator	B39431R2701U310	R2701	50x50	433,920	±75									
Resonator	B39431R 750U310	R 750	50x50	433,920	±50			B39431R1900A310 B39431R 970H110 B39431R 971H110 B39431R 990H110	R1900 R970 R971 R990	30x30 30x30 30x30 30x30	433,920	±50 kHz ±50 kHz ±50 kHz ±25 kHz		
Resonator	B39431R 850H210	R 850	35x50	433,940	±50			B39431R 992H110	R992	30x30	433,940	±25 kHz		
Resonator	B39431R 732U310	R 732	50x50	433,960	±75			B39431R 950U410	R950	30x30	433,960	±50 kHz		
Resonator	B39801R2712U310	R2712	50x50	804,500	±250									
Resonator	B39871R2709U310	R2709	50x50	868,300	±200			B39871R 808H210	R808	50x35	868,350	±140 kHz		1-port
Resonator	B39871R2711U310	R2711	50x50	868,350	±100			B39871R 858H210 B39871R 808H210	R858 R808	50x35 50x35	868,350	±75 kHz ±140 kHz		
Resonator	B39921R2706U310	R2706	50x50	915,000	±350			B39921R2906H110	R2906	30x30	915,000	±250 kHz		
Class	Ordering code	Type code	Package size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Ordering code	Ordering code	Type code	Size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Remark
Q filter	B39311B3577U310	B3577	50x50	311,060		0.3		B39311B3712U410	B3712	30x30	312,200		0.60	

Class	Parameters of discontinued SAW AE filters and resonators with PROTEC passivation						ELPAS replacement alternatives with same package size	ELPAS replacement alternatives with different package size						
	Ordering code	Type code	Package size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Ordering code	Ordering code	Type code	Size [mm <sup>2</sup> ]	Center frequency fc [MHz]	fc tolerance [kHz]	Usable bandwidth BW [MHz]	Remark
Q filter	B39321B3551U310	B3551	50x50	315,000		0.61		B39321B3781Z810 B39321B3741H110	B3781 B3741	38x38 30x30	315,000		0.55 0.36	
Q filter	B39321B3751U310	B3751	50x50	315,000		0.36		B39321B3761Z810 B39321B3741H110	B3761 B3741	38x38 30x30	315,000		0.36 0.36	
Q filter	B39321B3576U310	B3576	50x50	315,000		0.2		B39321B3761Z810 B39321B3741H110	B3761 B3741	38x38 30x30	315,000		0.36 0.36	
Q filter	B39351B3559U310	B3559	50x50	345,000		0.27	B39351B3582U310	B39351B3583Z810	B3583	38x38	345,000		0.80	
Q filter	B39401B4832U310	B4832	50x50	400,000		1.66		B39401B3742H110	B3742	30x30	400,000		0.25	
Q filter	B39421B3552U310	B3552	50x50	418,000		0.42					418,000			
Q filter	B39431B3567U310	B3567	50x50	433,420		0.22		B39431B3735H110 B39431B3791Z810 B39431B3778Z810	B3735 B3791 B3778	30x30 38x38 38x38	433,420		0.36 0.24 0.36	
Q filter	B39431B3550U310	B3550	50x50	433,920		0.44		B39431B3743H110 B39431B3760Z810	B3743 B3760	30x30 38x38	433,920 433,920		0.34 0.36	
Q filter	B39431B3750U310	B3750	50x50	433,920		0.36		B39431B3743H110 B39431B3760Z810	B3743 B3760	30x30 38x38	433,920 433,920		0.34 0.36	
Q filter	B39431B3575U310	B3575	50x50	433,920		0.22		B39431B3743H110 B39431B3760Z810	B3743 B3760	30x30 38x38	433,920		0.34 0.36	
Q filter	B39431B3555U310	B3555	50x50	433,920		0.57		B39431B3780Z810 B39431B3743Z810	B3780 B3743	38x38 30x30	433,920		0.55 0.34	
Q filter	B39431B3557U310	B3557	50x50	434,420		0.56		B39431B3733H110 B39431B3748H110 B39431B3771Z810	B3733 B3748 B3771	30x30 30x30 38x38	434,420		0.36 0.36 0.36	
Q filter	B39431B3757U310	B3757	50x50	434,420		0.36		B39431B3733H110 B39431B3748H110 B39431B3771Z810	B3733 B3748 B3771	30x30 30x30 38x38	434,420		0.36 0.36 0.36	
Q filter	B39451B3554U310	B3554	50x50	447,765		0.36		B39451B3907U410	B3907	30x30	447,700		1.60	
Q filter	B39871B3762Z810	B3762	38x38	868,300		0.6		B39871B3744H110	B3744	30x30	868,300		0.60	
Q filter	B39871B3570U310	B3570	50x50	868,300		0.98		B39871B3744H110	B3744	30x30	868,300		0.60	
Q filter	B39871B3574U310	B3574	50x50	868,300		0.28		B39871B3734H110 B39871B3776Z810	B3734 B3776	30x30 38x38	868,300		0.30 0.30	
Q filter	B39871B3793Z810	B3793	50x50	868,450		0.3		B39871B3734H110 B39871B3744H110 B39871B3746H110	B3734 B3744 B3746	30x30 30x30 30x30	868,300 868,300 868,600		0.30 0.60 1.20	
Q filter	B39871B3571U310	B3571	50x50	868,600		1.54		B39871B3746H110	B3746	30x30	868,600		1.20	
Q filter	B39871B3773Z810	B3773	50x50	868,950		0.5		B39871B3725U410	B3725	30x30	869,000		2.00	
Q filter	B39871B3572U310	B3572	50x50	868,950		0.88		B39871B3725U410	B3725	30x30	869,000		2.00	
Q filter	B39871B3573U310	B3573	50x50	869,600		0.8		B39871B3749H110	B3749	30x30	869,300		1.40	
Q filter	B39901B3772Z810	B3772	50x50	902,875		1.60		B39901B3934H110	B3934	30x30	902,875		1.55	