



SAW filters for mobile communications

Series/Type: B9429

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39252B9429K610	B39252B9455M410	2009-07-31	2009-11-30	2010-02-28

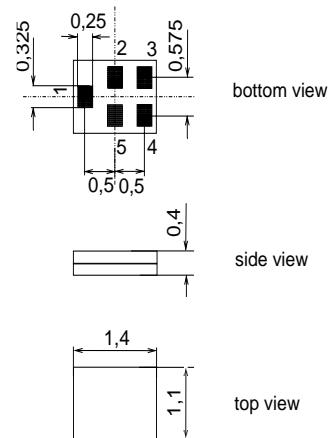
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Application

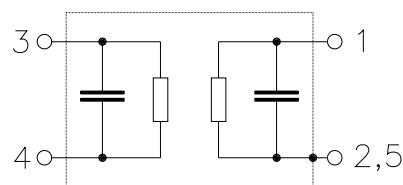
- Low-loss RF filter for WLAN
- Unbalanced to balanced operation
- Low insertion attenuation
- Usable passband 100 MHz


Features

- Package size 1.4 x1.1 x 0.4 mm³
- Package code QCS5F
- RoHS compatible
- Approximate weight 0.003 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**


Pin configuration

- 1 Unbalanced input
- 3,4 Balanced output
- 2,5 To be grounded



**SAW Components****B9429****SAW WLAN filter****2450.0 MHz****Data sheet****Characteristics**

Operating temperature range: $T = +25^\circ\text{C}$
Terminating source impedance: $Z_S = 50\Omega - 2.0\text{nH}$
Terminating load impedance: $Z_L = 180\Omega \parallel 9.5\text{nH}$

			min.	typ. @ 25 °C	max.	
Center frequency	f_C		—	2450.0	—	MHz
Maximum insertion attenuation		α_{\max}				
2400.0 ... 2500.0	MHz		—	2.4	2.9 ¹⁾	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
2400.0 ... 2500.0	MHz		—	0.7	1.5	dB
Input VSWR						
2400.0 ... 2500.0	MHz		—	1.7	2.0	
Output VSWR						
2400.0 ... 2500.0	MHz		—	1.7	2.0	
Attenuation		α				
100.0 ... 960.0	MHz		55	59	—	dB
960.0 ... 1800.0	MHz		40	44	—	dB
1800.0 ... 2100.0	MHz		40	44	—	dB
2100.0 ... 2170.0	MHz		40	44	—	dB
2170.0 ... 2250.0	MHz		20	44	—	dB
2250.0 ... 2800.0	MHz		20	31	—	dB
2800.0 ... 4000.0	MHz		25	36	—	dB
4000.0 ... 6000.0	MHz		30	50	—	dB

¹⁾ including a pcb loss of 0.2dB

**SAW Components****B9429****SAW WLAN filter****2450.0 MHz****Data sheet****Characteristics**

Operating temperature range: $T = -30^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\Omega - 2.0\text{nH}$
Terminating load impedance: $Z_L = 180\Omega \parallel 9.5\text{nH}$

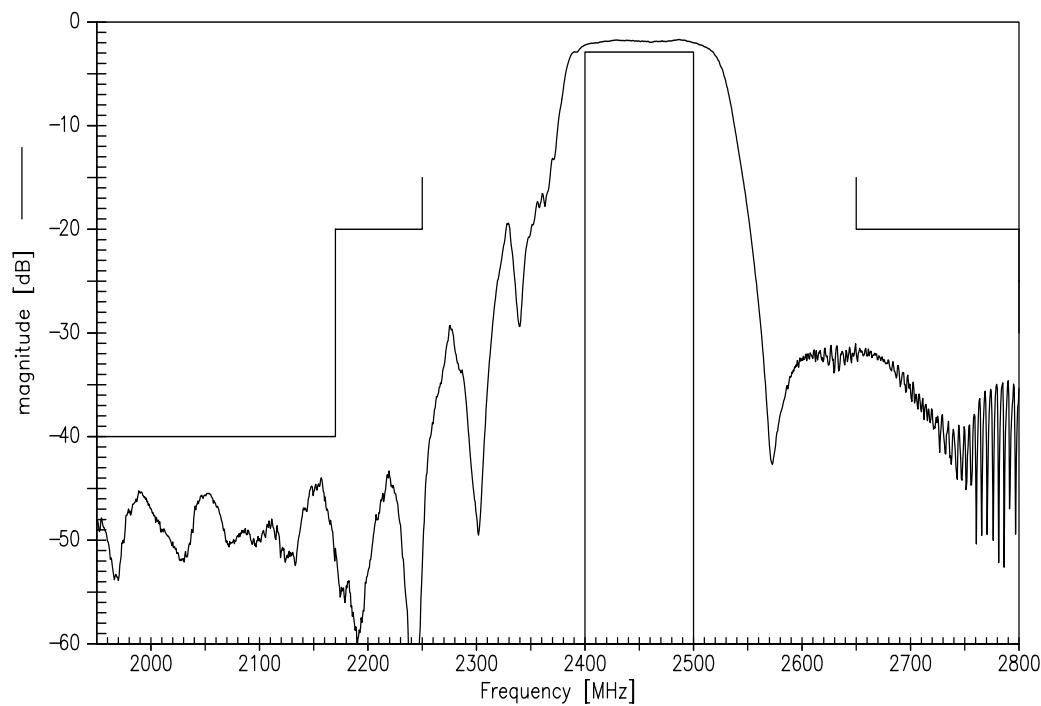
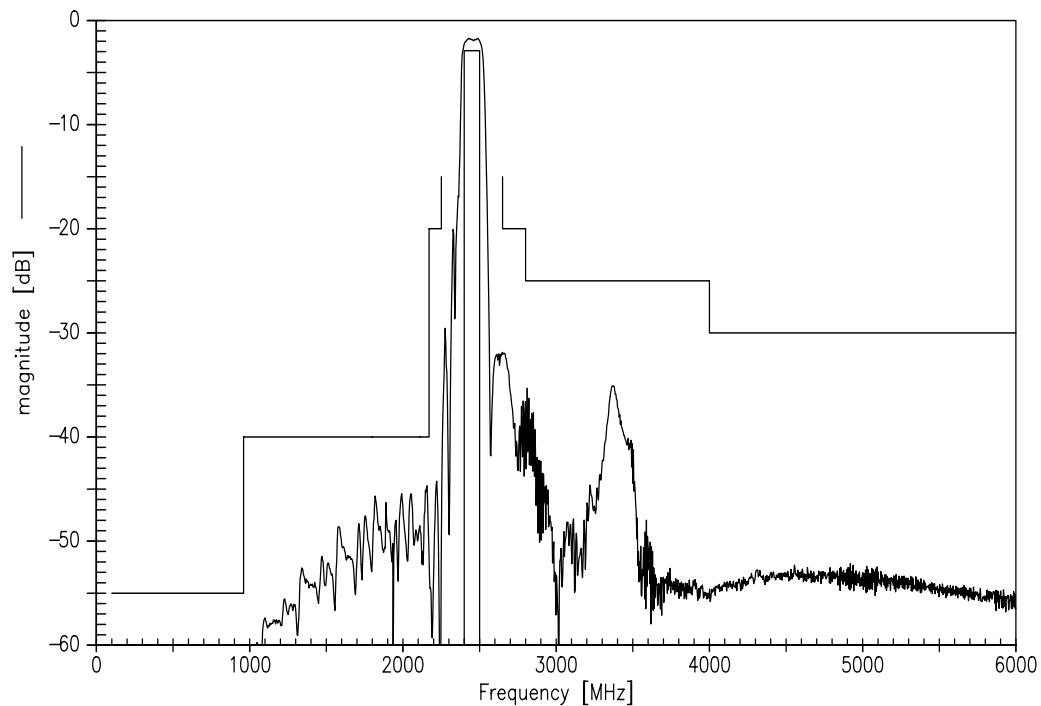
			min.	typ. @ 25 °C	max.	
Center frequency		f_C	—	2450.0	—	MHz
Maximum insertion attenuation		α_{\max}				
2400.0 ... 2500.0	MHz		—	2.5	3.2 ¹⁾	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
2400.0 ... 2500.0	MHz		—	1.0	1.6	dB
Input VSWR						
2400.0 ... 2500.0	MHz		—	1.7	2.0	
Output VSWR						
2400.0 ... 2500.0	MHz		—	1.7	2.0	
Attenuation		α				
100.0 ... 960.0	MHz		55	59	—	dB
960.0 ... 1800.0	MHz		40	44	—	dB
1800.0 ... 2100.0	MHz		40	44	—	dB
2100.0 ... 2170.0	MHz		40	44	—	dB
2170.0 ... 2250.0	MHz		20	44	—	dB
2650.0 ... 2800.0	MHz		20	31	—	dB
2800.0 ... 4000.0	MHz		25	36	—	dB
4000.0 ... 6000.0	MHz		30	50	—	dB

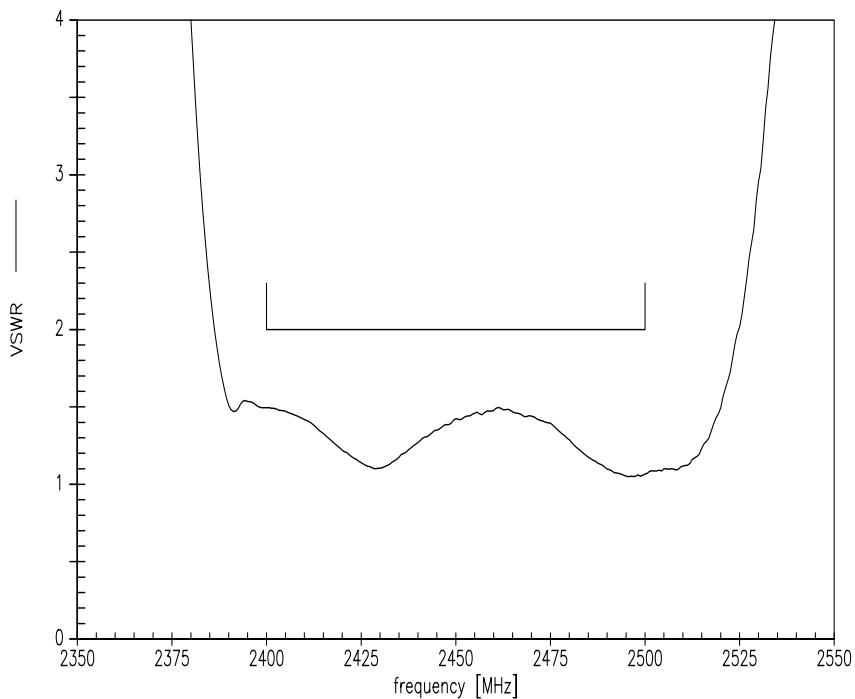
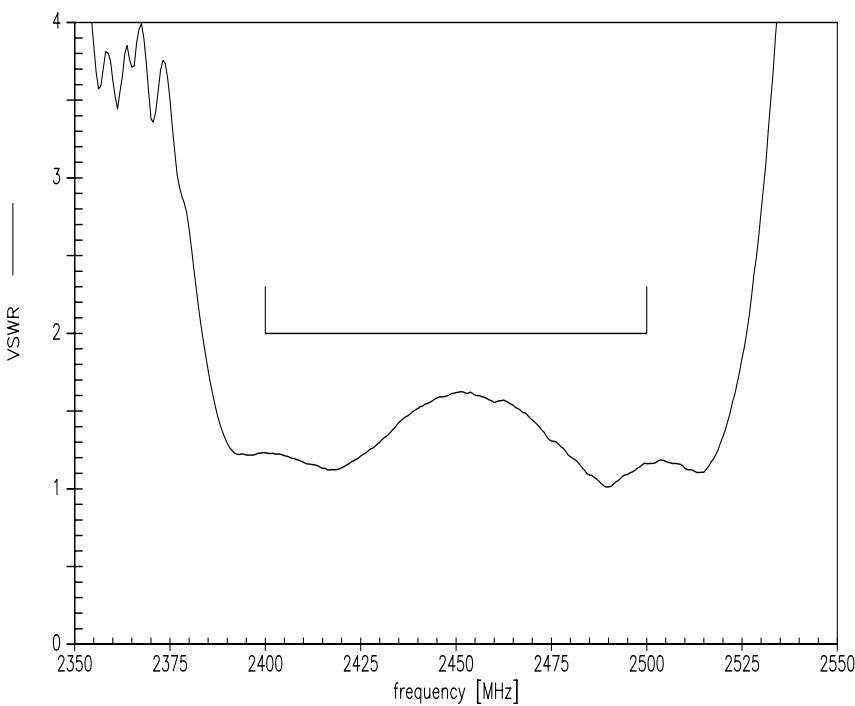
¹⁾ including a pcb loss of 0.2dB

**SAW Components****B9429****SAW WLAN filter****2450.0 MHz****Data sheet****Maximum ratings**

Operable temperature range	T	−30/+85	°C	
Storage temperature range	T _{stg}	−40/+85	°C	
DC voltage	V _{DC}	3	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 10 pulses
Input power at UMTS band I Tx band	P _{IN}	15	dBm	CW, +65°C 2000hr

¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.

Transfer function

Transfer function (wideband)


Input VSWR

Output VSWR




SAW Components	B9429
SAW WLAN filter	2450.0 MHz
Data sheet	

References

Type	B9429
Ordering code	B39252B9429K610
Marking and package	C61157-A8-A1
Packaging	F61074-V8212-Z000
Date codes	L_1126
S-parameters	LK41A_NB.s3p LK41A_WB.s3p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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Please read *cautions and warnings and important notes* at the end of this document.

8 March 09, 2009

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