



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The following products presented in this data sheet are being withdrawn.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

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

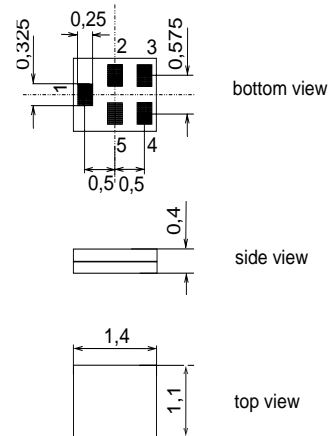
Application

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



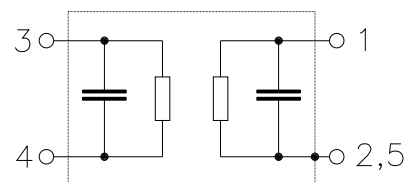
Features

- Package size 1.4 x 1.1 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: $T = +25\text{ °C}$
 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
	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



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Characteristics

Operating temperature range: $T = -30\text{ °C to }+85\text{ °C}$
 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}			—	2.5	3.2 ¹⁾	dB
2400.0 ... 2500.0 MHz							
Amplitude ripple (p-p)	$\Delta\alpha$			—	1.0	1.6	dB
2400.0 ... 2500.0 MHz							
Input VSWR				—	1.7	2.0	
2400.0 ... 2500.0 MHz							
Output VSWR				—	1.7	2.0	
2400.0 ... 2500.0 MHz							
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



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2450.0 MHz

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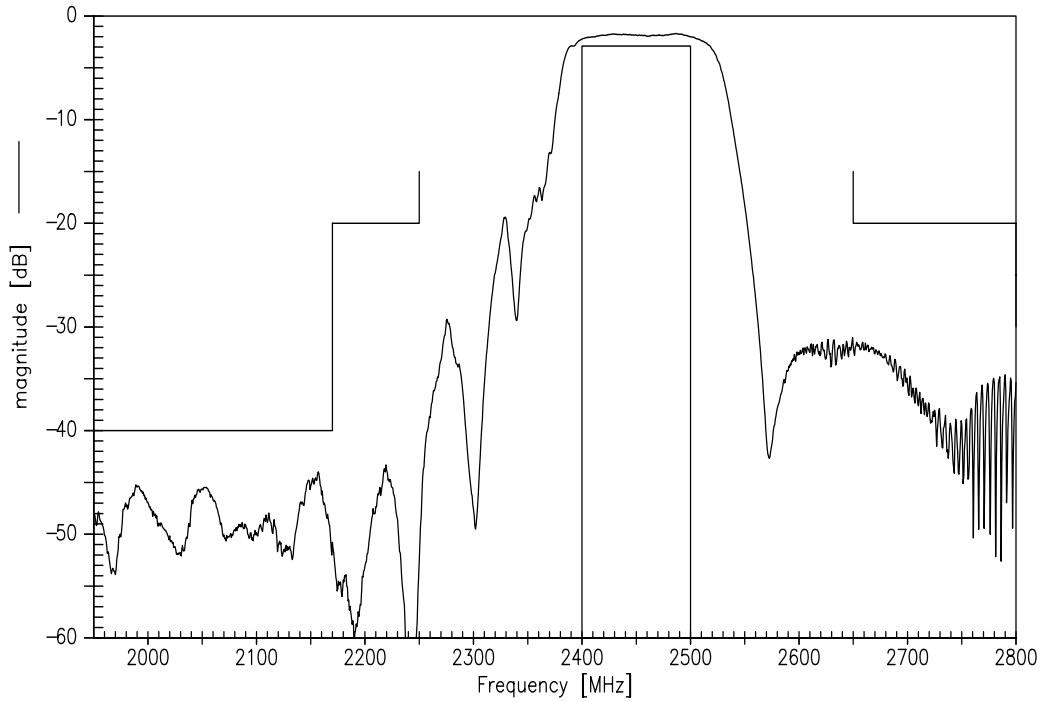
Maximum ratings

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

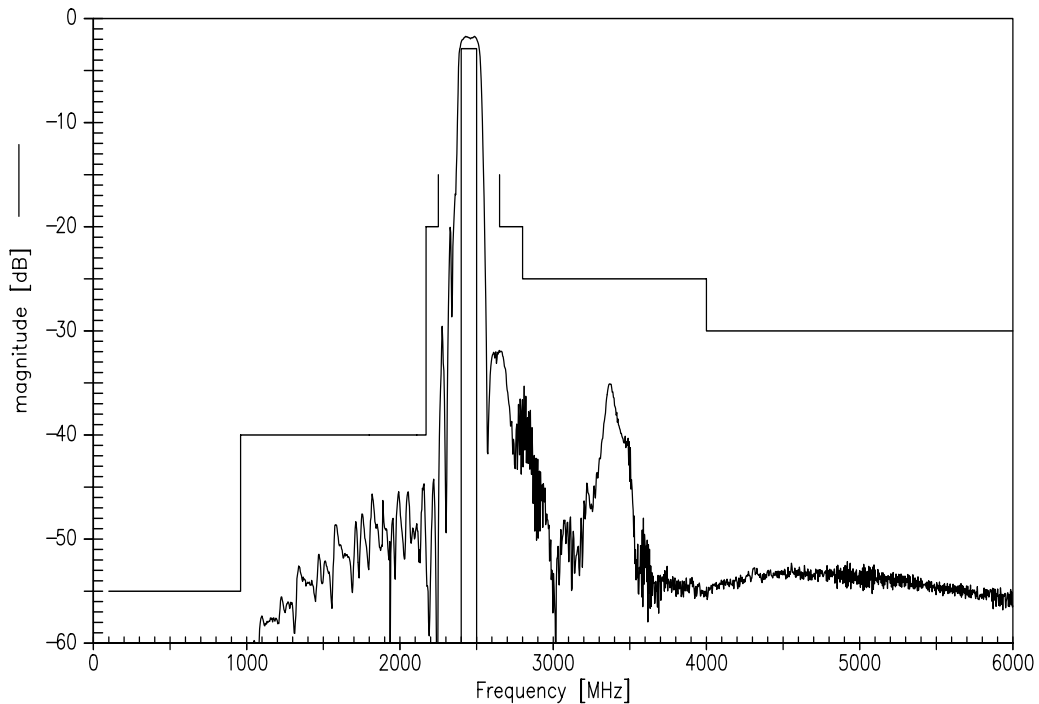
¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function



Transfer function (wideband)



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



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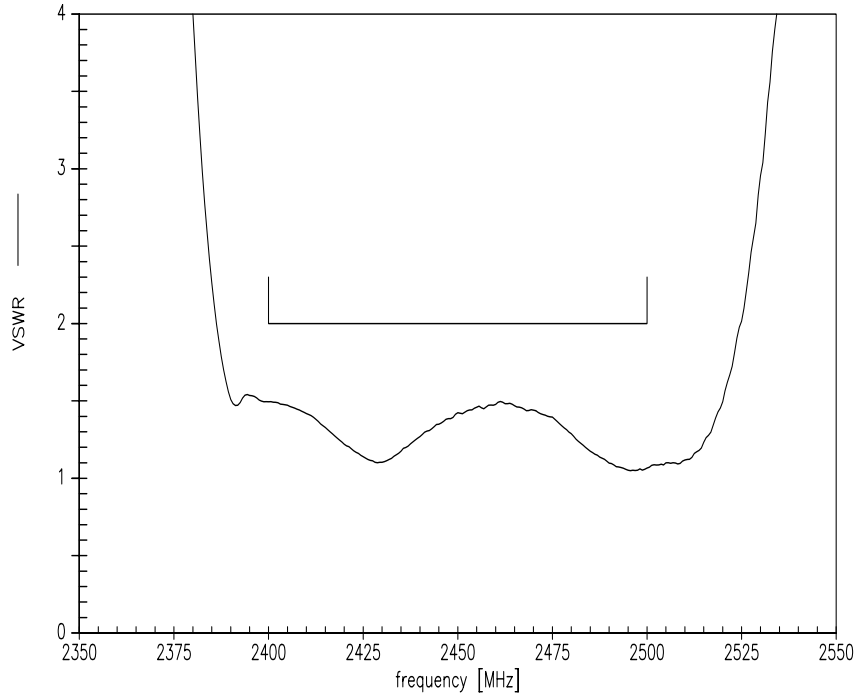
SAW WLAN filter

2450.0 MHz

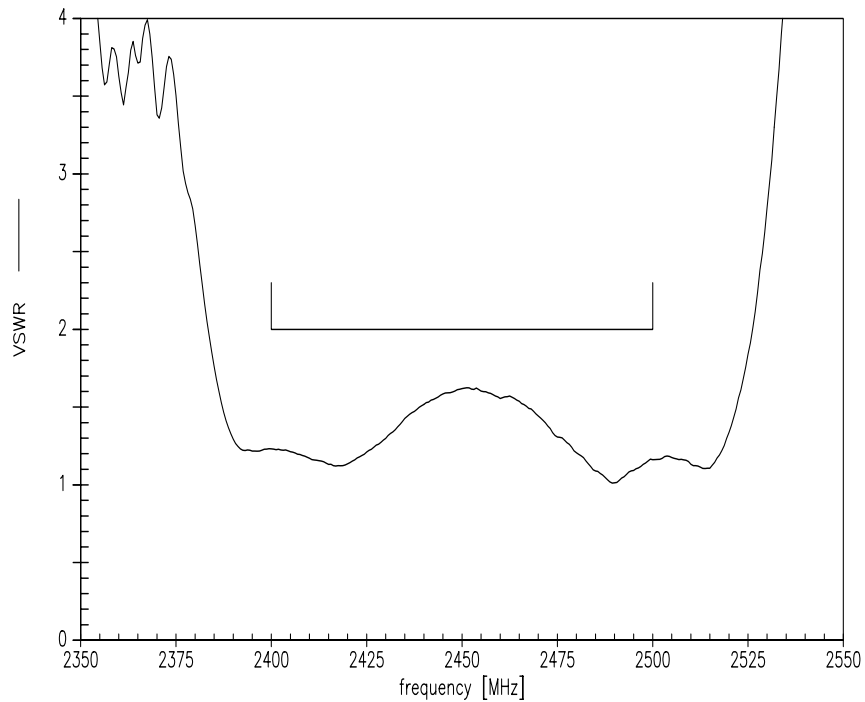
Data sheet



Input VSWR



Output VSWR



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7 March 09, 2009

**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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