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[B39162B9415K610](#)

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SAW Components

SAW filter GPS

Series/type:
Ordering code:

B9415
B39162B9415K610

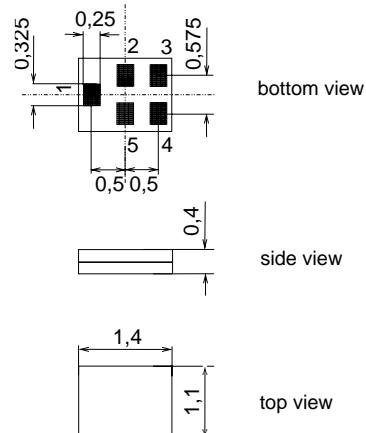
Date: January 23, 2009
Version: 2.3

**SAW Components****B9415****SAW filter****1575.42 MHz****Data sheet****Application**

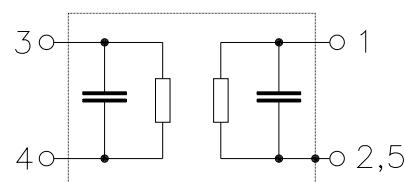
- Low-loss RF filter for mobile telephone
GPS systems
- Filter impedance 50 Ω
- Unbalanced to unbalanced operation
- Very low insertion attenuation
- Low amplitude ripple
- Usable passband 2.0 MHz

**Features**

- Package size 1.4 x1.1 x 0.4 mm³
- Package code QCS5U
- RoHS compatible
- Approximate weight 0.003 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- Electrostatic **Sensitive Device (ESD)**

**Pin configuration**

- 1 Input unbalanced
- 4 Output unbalanced
- 2,3,5 To be grounded





SAW Components		B9415		
SAW filter		1575.42 MHz		
Data sheet				
Characteristics				
Temperature range for specification:		$T = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$		
Terminating source impedance:		$Z_S = 50 \Omega$		
Terminating load impedance:		$Z_L = 50 \Omega$		
Center frequency	f_C	min.	typ. @ 25°C	max.
1574.42 ... 1576.42 MHz		—	1575.42	—
Maximum insertion attenuation	α_{max}			
1574.42 ... 1576.42 MHz		—	0.6	1.0 ¹⁾
Amplitude ripple (p-p)	$\Delta\alpha$			
1574.42 ... 1576.42 MHz		—	0.0	0.3
Input VSWR				
1574.42 ... 1576.42 MHz		—	1.2	1.6 ²⁾
Output VSWR				
1574.42 ... 1576.42 MHz		—	1.2	1.6 ³⁾
Attenuation	α			
500.0 ... 894.0 MHz		16	18	—
894.0 ... 1500.0 MHz		15	17	—
1650.0 ... 4000.0 MHz		17	19	—
4000.0 ... 6000.0 MHz		15	20	—

¹⁾ 0.9dB max. at -30°C ... 75°C ²⁾ 1.5 max. at -30°C ... 75°C ³⁾ 1.5 max. at -30°C ... 75°C

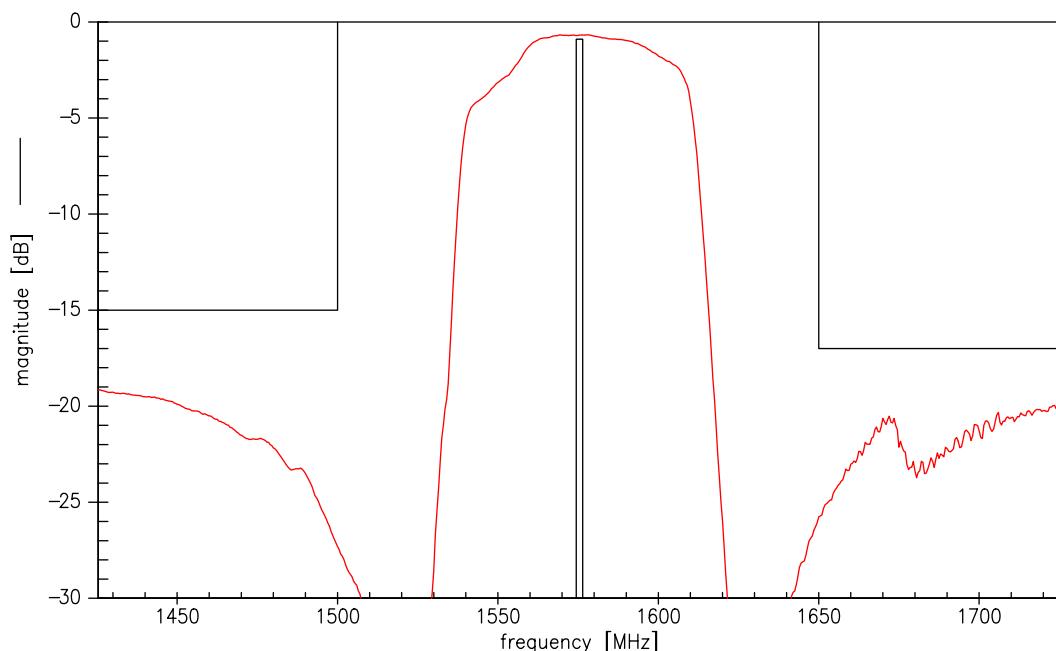
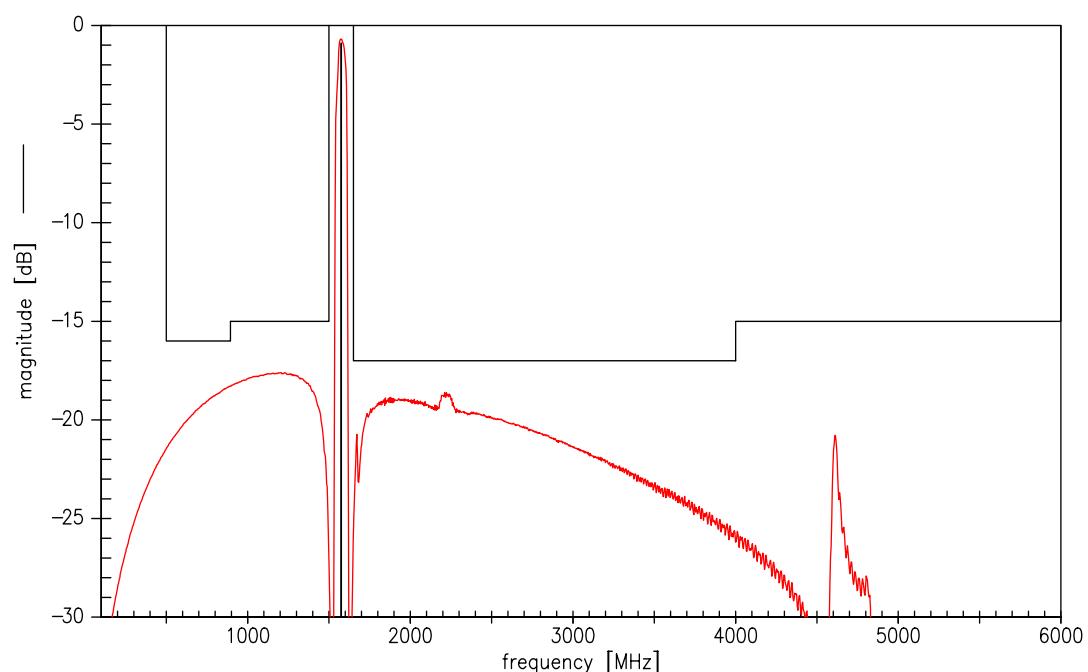
**SAW Components****B9415****SAW filter****1575.42 MHz**

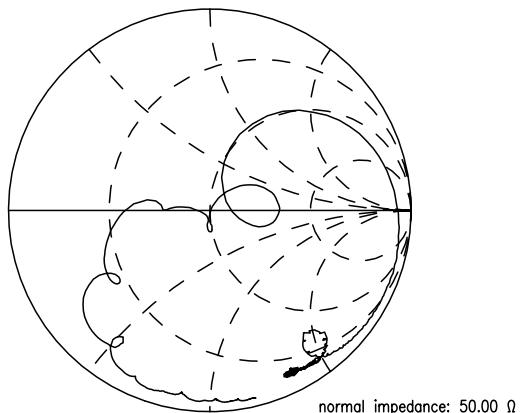
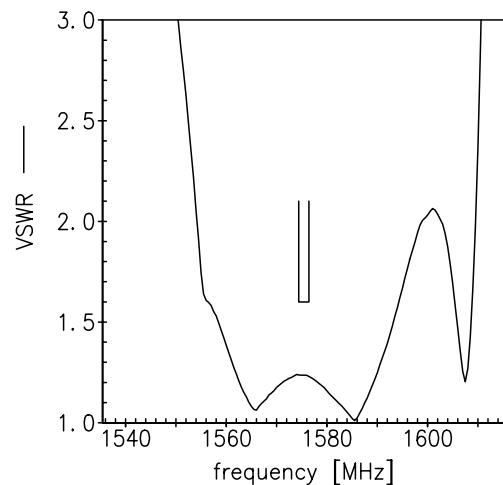
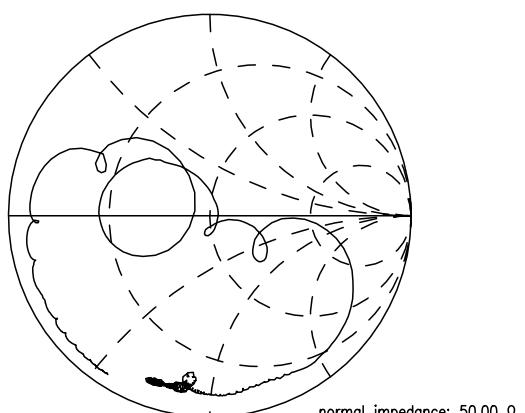
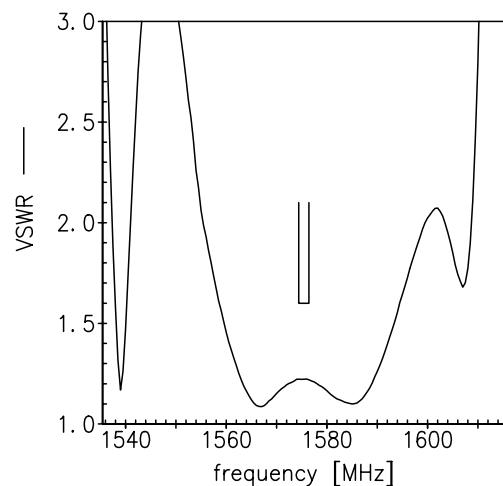
Data sheet

**Maximum ratings**

Operable temperature range	T	-40/+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				source/load impedance 50Ω/50Ω
1574.42 ... 1576.42 MHz	P _{IN}	10	dBm	cw
2400 ... 2483.5 MHz	P _{IN}	20	dBm	cw
824...960, 1710...2170 MHz	P _{IN}	25	dBm	cw

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

**SAW Components****B9415****SAW filter****1575.42 MHz****Data sheet****SMD****Transfer function (narrow band)****Transfer function (wide band)**

**SAW Components****B9415****SAW filter****1575.42 MHz****Data sheet****Smith charts** **S_{11} function** **S_{22} function**



SAW Components	B9415
SAW filter	1575.42 MHz
Data sheet	

References

Type	B9415
Ordering code	B39162B9415K610
Marking and package	C61157-A8-A14
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B9415_NB.s2p B9415_WB.s2p "See file header for port/pin assignment table"
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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