



## **SAW Components**

**SAW RF filter**

GPS

<b>Series/type:</b>	<b>B4060</b>
<b>Ordering code:</b>	<b>B39162B4060U810</b>
<b>Date:</b>	<b>July 22, 2008</b>
<b>Version:</b>	<b>2.1</b>



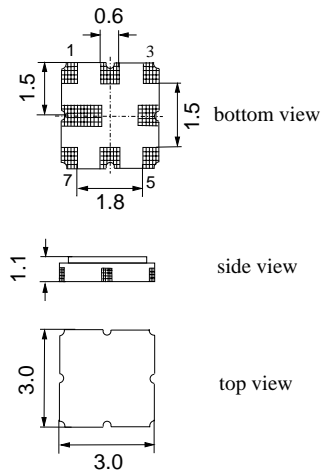
**Application**

- Low-loss RF filter for GPS application
- Unbalanced to unbalanced operation or unbalanced to balanced operation
- Hermetically sealed ceramic package
- No matching network required for operation at 50 Ω



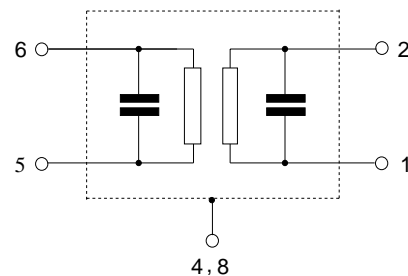
**Features**

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- Package code QCC8D
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- AEC-Q200 qualified component family
- **Electrostatic Sensitive Device (ESD)**



**Pin configuration**

- 6 Input
- 5 Input ground
- 2 Output
- 1 Output (bal.) or output ground (unbal.)
- 3, 7 To be grounded
- 4, 8 Case - ground





<b>SAW Components</b>	<b>B4060</b>
<b>SAW RF filter</b>	<b>1575.42 MHz</b>

Data sheet



**Characteristics**

Temperature range for specification:  $T_A = -40\text{ °C to }+105\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega\ \text{unbal.}$   
 Terminating load impedance:  $Z_L = 50\ \Omega\ \text{unbal.}$

		<b>min.</b>	<b>typ. @25°C</b>	<b>max.</b>	
<b>Nominal frequency</b>	$f_N$	—	1575.42	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\text{max}}$	—	1.3	2.0 <sup>1)</sup>	dB
1574.22 ... 1576.62 MHz					
<b>Amplitude ripple in passband (p-p)</b>	$\Delta\alpha$	—	0.1	1.0	dB
1574.22 ... 1576.62 MHz					
<b>Attenuation</b>	$\alpha$				dB
100.00 ... 1450.00 MHz		40	44	—	
1450.00 ... 1520.00 MHz		30	34	—	
1625.00 ... 1640.00 MHz		20	25	—	
1640.00 ... 1710.00 MHz		25	30	—	
1710.00 ... 1805.00 MHz		35	43	—	
1805.00 ... 1910.00 MHz		45	52	—	
1910.00 ... 2000.00 MHz		40	45	—	

1)  $T = -45\text{ °C to }+85\text{ °C} : 1.8\ \text{dB}$

**Maximum ratings**

Operable temperature range	T	-45/+125	°C	
Storage temperature range	T <sub>stg</sub>	-45/+125	°C	
DC voltage	V <sub>DC</sub>	6	V	
Source power	P <sub>S</sub>	10	dBm	source impedance 50 Ω, c. w. 824 MHz to 849 MHz, 890 MHz to 915 MHz, 1710 MHz to 1785 MHz
		20	dBm	



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B4060

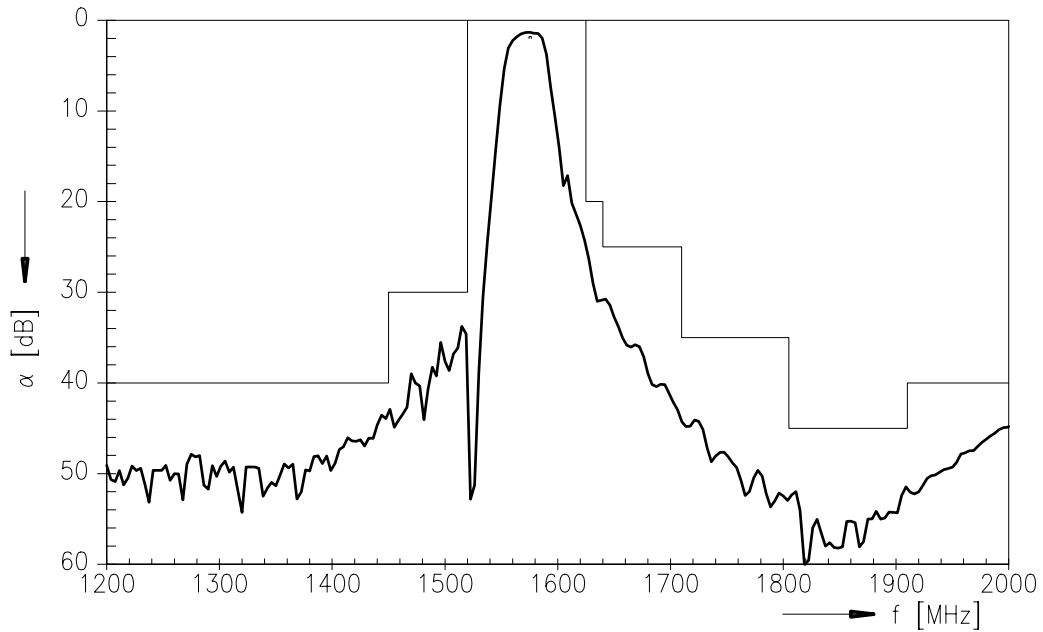
SAW RF filter

1575.42 MHz

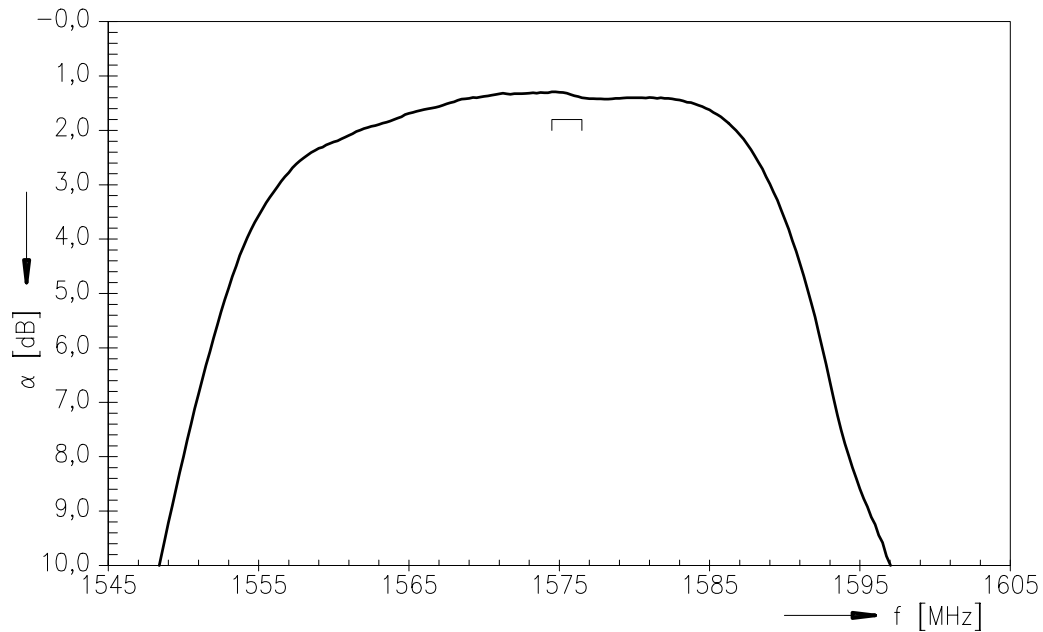
Data sheet



Transfer function



Transfer function (passband)



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



SAW Components

B4060

SAW RF filter

1575.42 MHz

Data sheet



## References

Type	B4060
Ordering code	B39162B4060U810
Marking and package	C61157-A7-A72
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B4060_NB.s2p B4060_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."

For further information please contact your local EPCOS sales office or visit our webpage at [www.epcos.com](http://www.epcos.com).

Published by EPCOS AG  
Surface Acoustic Wave Components Division  
P.O. Box 80 17 09, 81617 Munich, GERMANY

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



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