



## 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>

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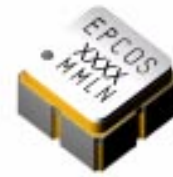


Data sheet



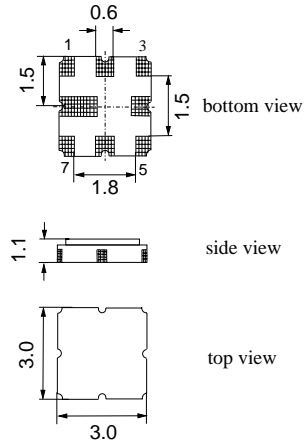
Application

- 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



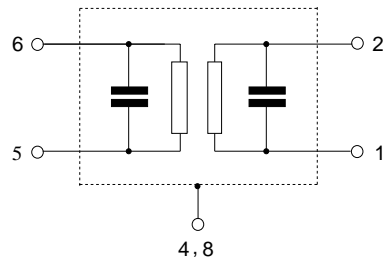
Features

- 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



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



**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:  $Z_L = 50\ \Omega\text{ unbal.}$

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

<sup>1)</sup> T = -45 °C to +85 °C : 1.8 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 20	dBm dBm	source impedance 50 Ω, c. w. 824 MHz to 849 MHz, 890 MHz to 915 MHz, 1710 MHz to 1785 MHz

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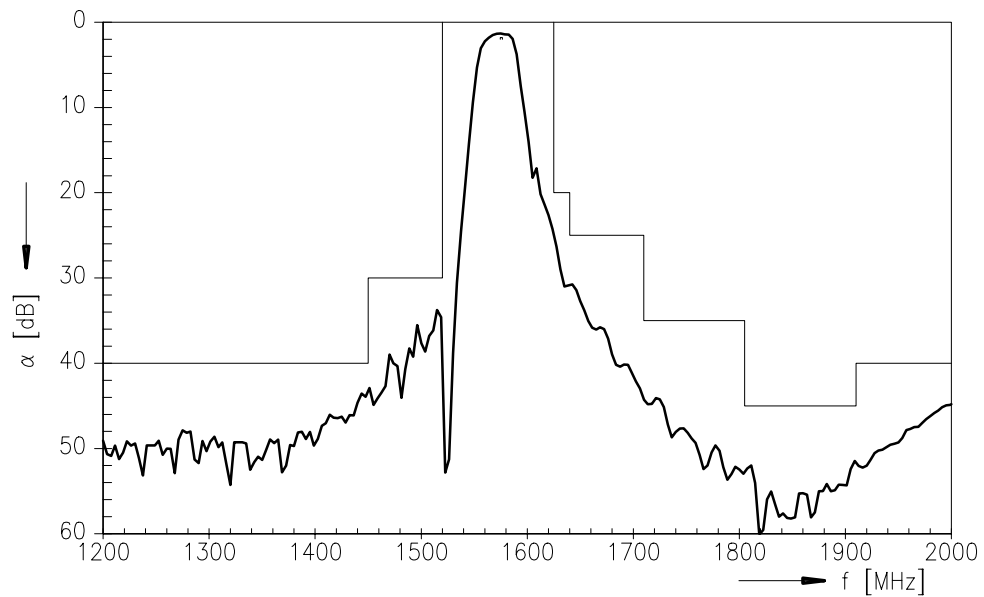
SAW RF filter

1575.42 MHz

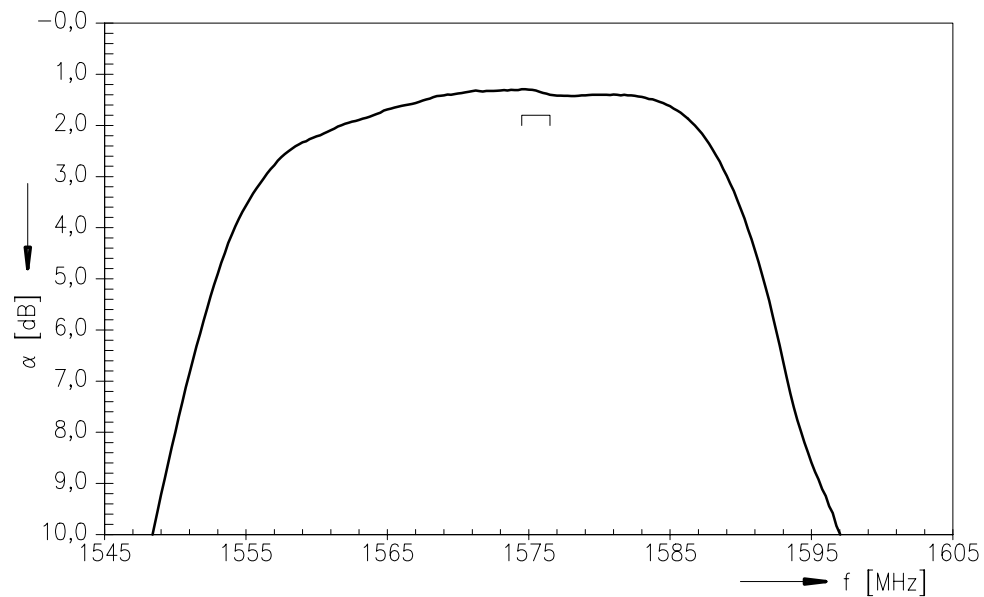
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Transfer function



Transfer function (passband)



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**SAW Components** **B4060**

**SAW RF filter** **1575.42 MHz**

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## References

<b>Type</b>	B4060
<b>Ordering code</b>	B39162B4060U810
<b>Marking and package</b>	C61157-A7-A72
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B4060_NB.s2p B4060_WB.s2p See file header for port/pin assignment table.
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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."

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