



## **SAW Components**

### **SAW RF filter**

Automotive telematics

<b>Series/type:</b>	<b>B3529</b>
<b>Ordering code:</b>	<b>B39162B3529U410</b>
<b>Date:</b>	<b>April 15, 2008</b>
<b>Version:</b>	<b>2.2</b>



Data sheet



**Application**

- Low-loss RF filter for Glonass application
- No matching network required for operation at 50 Ω



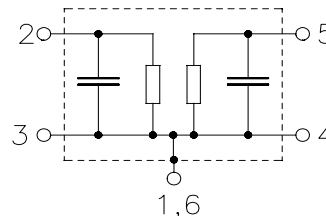
**Features**

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- Package code DCC6C
- 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**

- 2 Input
- 5 Output
- 1, 3, 4, 6 Ground





<b>SAW Components</b>	<b>B3529</b>
<b>SAW RF filter</b>	<b>1601.50 MHz</b>

Data sheet



**Characteristics**

Temperature range for specification:  $T = -40\text{ °C to }+85\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b>	$f_C$	—	1601.5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$	—	2.5	4.0	dB
1593.00 ... 1610.00 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0.6	2.5	dB
1593.00 ... 1610.00 MHz					
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	12	27	ns
1593.00 ... 1610.00 MHz					
<b>VSWR</b>		—	1.6	2.0	
1593.00 ... 1610.00 MHz					
<b>Attenuation</b>	$\alpha$				
700.00 ... 1400.00 MHz		40	44	—	dB
1400.00 ... 1530.00 MHz		35	40	—	
1530.00 ... 1570.00 MHz		10	12	—	
1625.00 ... 1640.00 MHz		10	25	—	
1640.00 ... 1650.00 MHz		22	37	—	
1650.00 ... 1670.00 MHz		30	48	—	
1670.00 ... 1870.00 MHz		40	43	—	
1870.00 ... 2270.00 MHz		35	38	—	
2270.00 ... 2700.00 MHz		30	35	—	



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B3529

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1601.50 MHz

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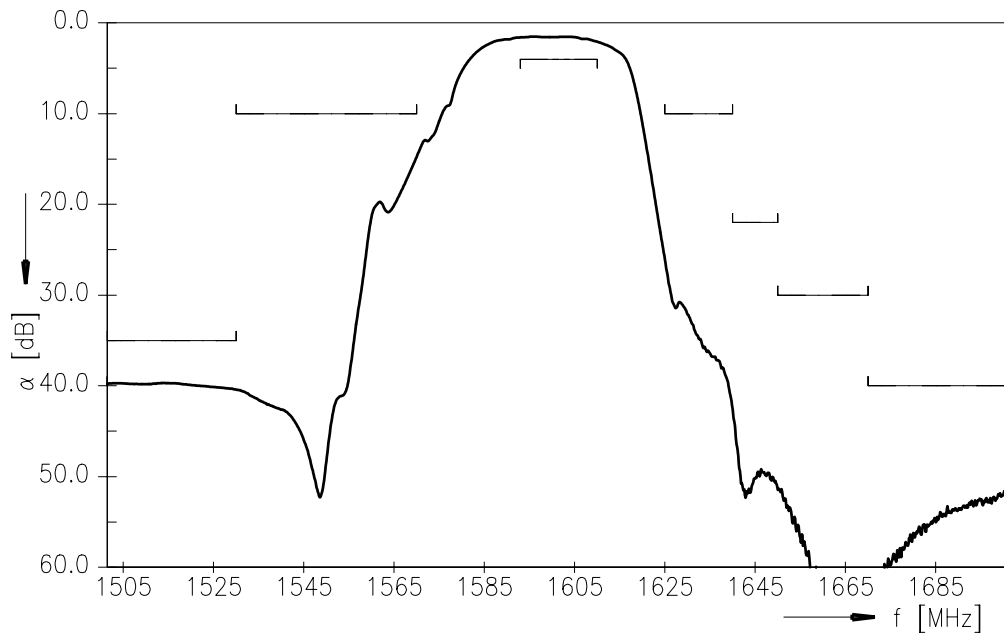


### Maximum ratings

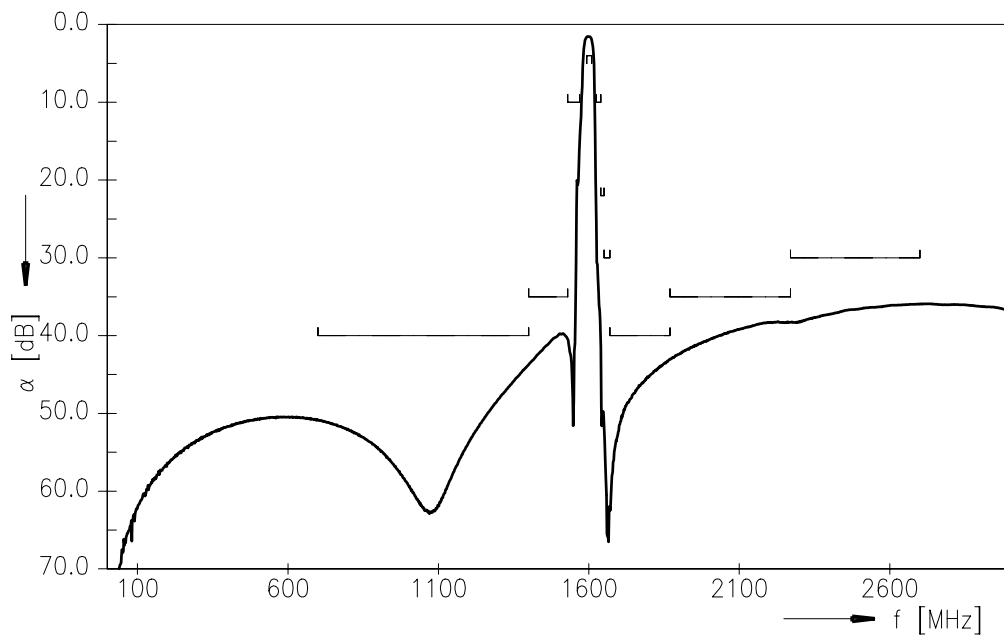
Operable temperature range	T	-45/+125	°C	
Storage temperature range	T <sub>stg</sub>	-45/+125	°C	
DC voltage	V <sub>DC</sub>	6	V	
Source power	P <sub>S</sub>	10	dBm	source impedance 50 Ω



Transfer function



Transfer function (wideband)





Transfer function





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**B3529**

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**1601.50 MHz**

Data sheet



## References

<b>Type</b>	B3529
<b>Ordering code</b>	B39162B3529U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B3529_NB.s2p B3529_WB.s2p
<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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