



# SAW Components

Data Sheet B3520

Data Sheet

EP



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Low Loss Filter for Automotive Telematics

1575,42 MHz

Data Sheet

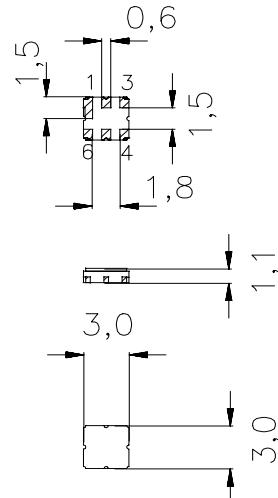
Ceramic package DCC6C

### Features

- RF low-loss filter for GPS application
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package
- No matching network required for operation at 50  $\Omega$
- Extended temperature range for automotive application

### Terminals

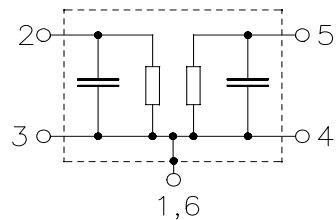
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

### Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B3520	B39162-B3520-U410	C61157-A7-A56	F61074-V8070-Z000

Electrostatic Sensitive Device (ESD)

### Maximum ratings

Operable temperature range	$T_A$	-40/+105	°C	
Storage temperature range	$T_{stg}$	-40/+105	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_S$	0	dBm	source impedance 50 $\Omega$

**SAW Components****B3520****Low Loss Filter for Automotive Telematics****1575,42 MHz****Data Sheet****Characteristics**Reference temperature:  $T_A = -40 \dots +85^\circ\text{C}$ Terminating source impedance:  $Z_S = 50\Omega$ Terminating load impedance:  $Z_L = 50\Omega$ 

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b>	$f_c$	—	1575,42	—	MHz
<b>Maximum insertion attenuation</b>	1574,22 ... 1576,62 MHz	$\alpha_{\max}$	—	1,3	1,8 dB
<b>Amplitude ripple (p-p)</b>	1574,22 ... 1576,62 MHz	$\Delta\alpha$	—	0,1	1,0 dB
<b>Relative attenuation (relative to <math>\alpha_{\max}</math>)</b>		$\alpha_{\text{rel}}$			
	100,00 ... 1450,00 MHz	40	44	—	dB
	1450,00 ... 1520,00 MHz	30	34	—	dB
	1640,00 ... 1710,00 MHz	25	30	—	dB
	1710,00 ... 1750,00 MHz	35	43	—	dB
	1750,00 ... 1910,00 MHz	42	44	—	dB
	1910,00 ... 2000,00 MHz	40	45	—	dB
<b>Temperature coefficient of frequency</b>		$TC_f$	—	-30	— ppm/K

**SAW Components****B3520****Low Loss Filter for Automotive Telematics****1575,42 MHz****Data Sheet****Characteristics**Reference temperature:  $T_A = -40 \dots +105 \text{ }^\circ\text{C}$ Terminating source impedance:  $Z_S = 50\Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b>	$f_c$	—	1575,42	—	MHz
<b>Maximum insertion attenuation</b>	$1574,22 \dots 1576,62 \text{ MHz}$	$\alpha_{\max}$	—	1,3	2,0
<b>Amplitude ripple (p-p)</b>	$1574,22 \dots 1576,62 \text{ MHz}$	$\Delta\alpha$	—	0,1	1,0
<b>Relative attenuation (relative to <math>\alpha_{\max}</math>)</b>	$100,00 \dots 1450,00 \text{ MHz}$	$\alpha_{\text{rel}}$	40	44	—
	$1450,00 \dots 1520,00 \text{ MHz}$		30	34	—
	$1640,00 \dots 1710,00 \text{ MHz}$		25	30	—
	$1710,00 \dots 1750,00 \text{ MHz}$		35	43	—
	$1750,00 \dots 1910,00 \text{ MHz}$		42	44	—
	$1910,00 \dots 2000,00 \text{ MHz}$		40	45	—
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-30	—	ppm/K



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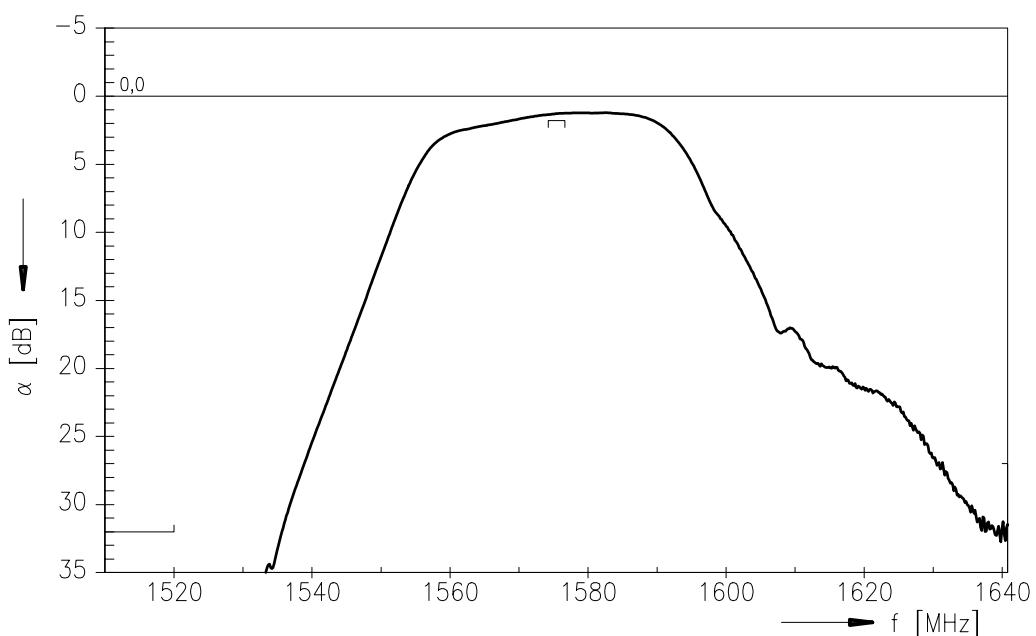
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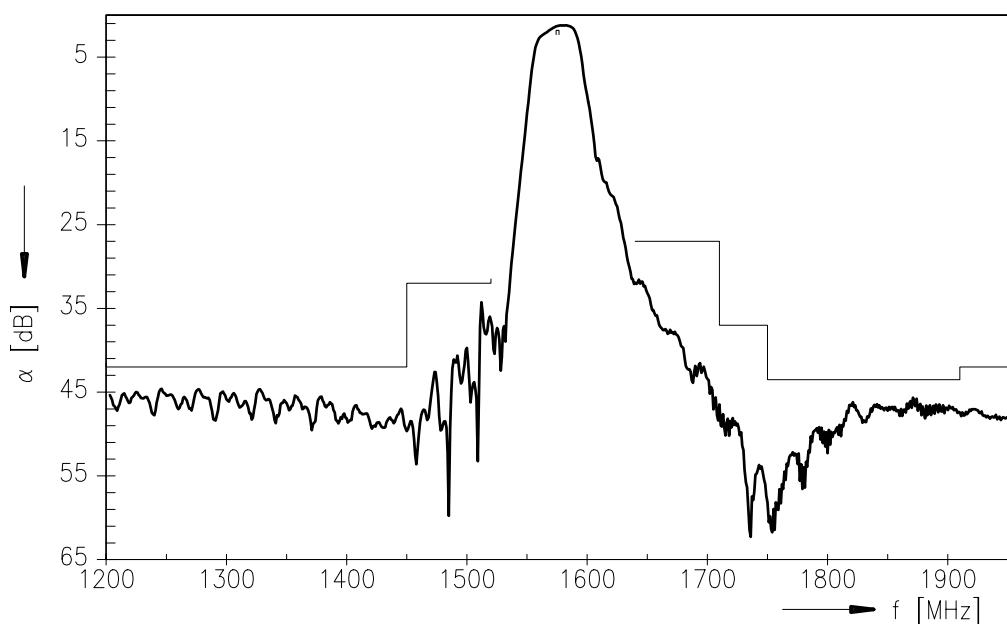
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### Transfer function



### Transfer function (wideband)





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