



# SAW Components

Data Sheet B3520





**SAW Components**

**B3520**

**Low Loss Filter for Automotive Telematics**

**1575,42 MHz**

**Data Sheet**

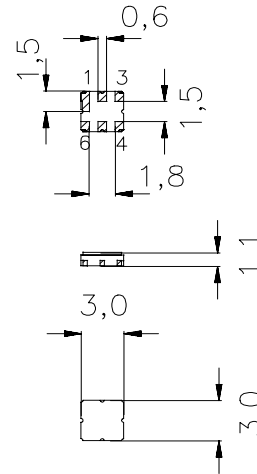
Ceramic package **DCC6C**

**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 Ω
- Extended temperature range for automotive application

**Terminals**

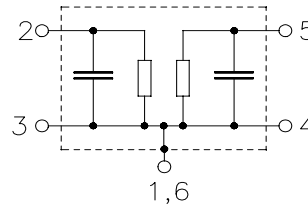
- Ni, gold plated



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 Ω



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**Characteristics**

Reference temperature:  $T_A = -40 \dots +85 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ }\Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ }\Omega$

		min.	typ.	max.	
<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>	$\Delta\alpha$				
1574,22 ... 1576,62 MHz		—	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



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**Characteristics**

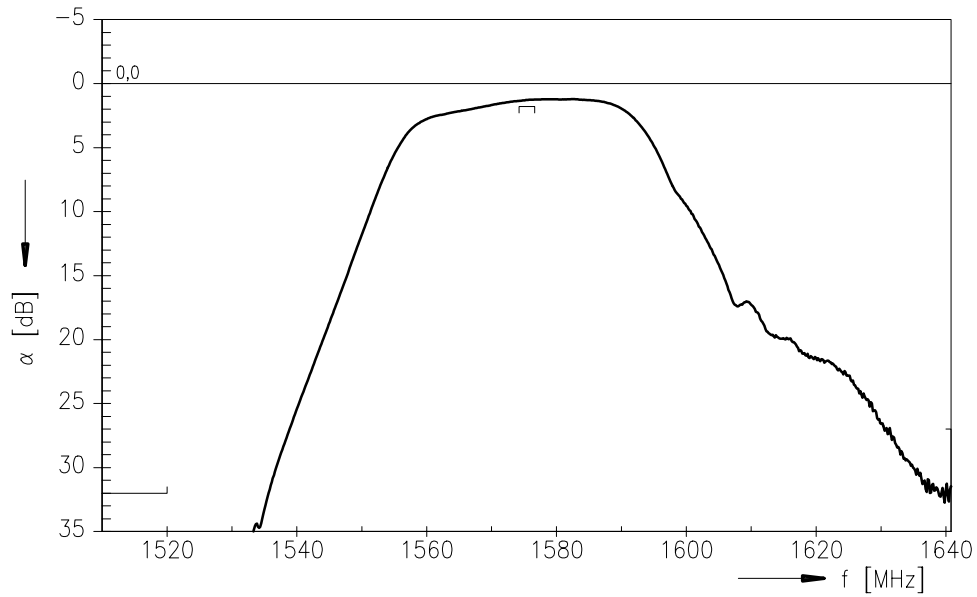
Reference temperature:  $T_A = -40 \dots +105 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \Omega$   
 Terminating load impedance:  $Z_L = 50 \Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	1575,42	—	MHz
<b>Maximum insertion attenuation</b>					
	1574,22 ... 1576,62 MHz $\alpha_{\max}$	—	1,3	2,0	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>					
	100,00 ... 1450,00 MHz $\alpha_{\text{rel}}$	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
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<b>Temperature coefficient of frequency</b>	$TC_f$	—	-30	—	ppm/K

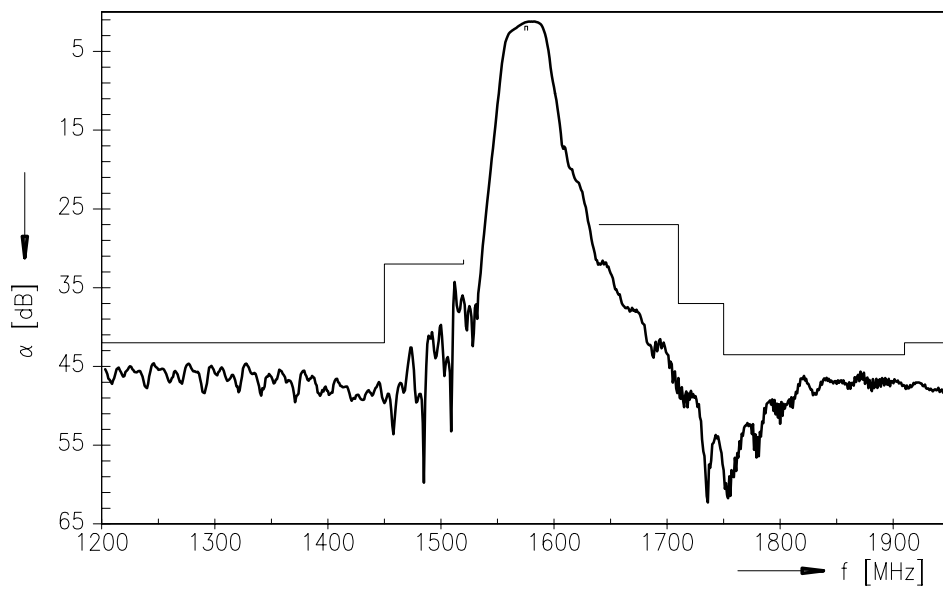


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Transfer function



Transfer function (wideband)





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