



SAW Components

SAW RF filter

GPS

Series/type:	B3522
Ordering code:	B39162B3522U410
Date:	April 01, 2008
Version:	2.1

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1575.42 MHz

Data sheet

SMD

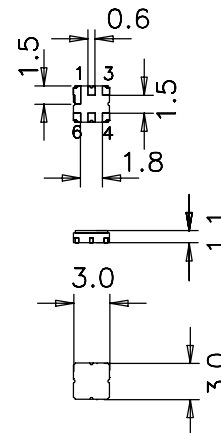
Application

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



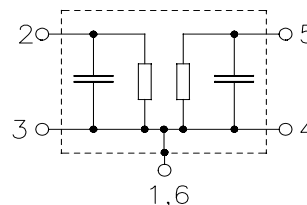
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- 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



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

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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.	
Center frequency	f_C	—	1575.42	—	MHz
Maximum insertion attenuation 1574.397 ... 1576.443 MHz	α_{max}	—	1.6	2.0	dB
Amplitude ripple (p-p) 1574.397 ... 1576.443 MHz	$\Delta\alpha$	—	0.2	0.8	dB
Input VSWR 1574.397 ... 1576.443 MHz		—	1.4	1.8	
Output VSWR 1574.397 ... 1576.443 MHz		—	1.3	1.8	
Attenuation	α				
10.00 ... 1450.00 MHz		40	43	—	dB
1450.00 ... 1500.00 MHz		35	45	—	dB
1625.00 ... 1640.00 MHz		35	50	—	dB
1640.00 ... 1800.00 MHz		44	47	—	dB
1800.00 ... 2000.00 MHz		42	44	—	dB
2000.00 ... 3000.00 MHz		30	35	—	dB

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Characteristics

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

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	1575.42	—	MHz
Maximum insertion attenuation 1574.397 ... 1576.443 MHz	α_{max}	—	1.6	2.2	dB
Amplitude ripple (p-p) 1574.397 ... 1576.443 MHz	$\Delta\alpha$	—	0.2	1.0	dB
Input VSWR 1574.397 ... 1576.443 MHz		—	1.4	1.9	
Output VSWR 1574.397 ... 1576.443 MHz		—	1.3	1.9	
Attenuation	α				
10.00 ... 1450.00 MHz		40	43	—	dB
1450.00 ... 1500.00 MHz		33	45	—	dB
1625.00 ... 1640.00 MHz		35	50	—	dB
1640.00 ... 1800.00 MHz		44	47	—	dB
1800.00 ... 2000.00 MHz		42	44	—	dB
2000.00 ... 3000.00 MHz		30	35	—	dB

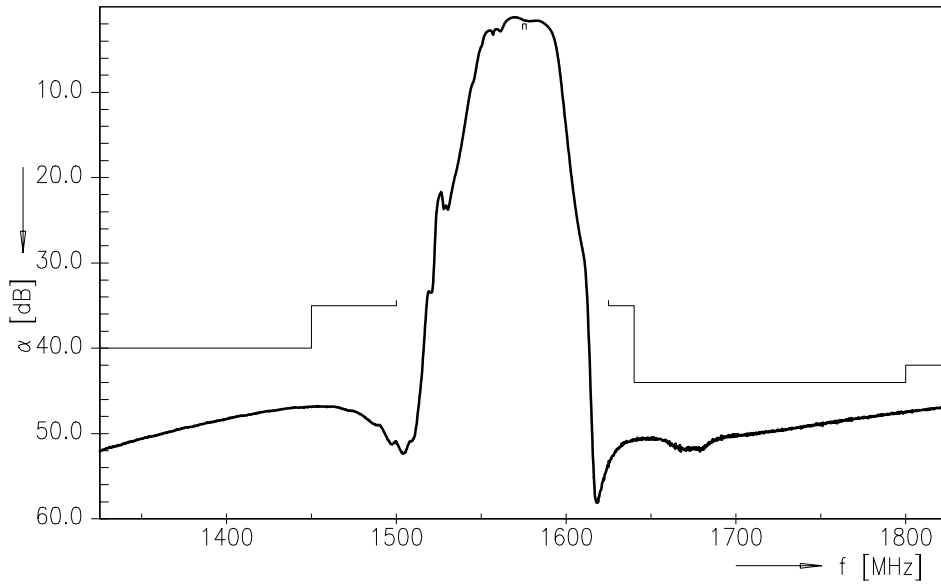
Maximum ratings

Operable temperature range	T	-40/+125	°C	
Storage temperature range	T _{stg}	-40/+125	°C	
DC voltage	V _{DC}	6	V	
Source power	P _S	10	dBm	source impedance 50 Ω

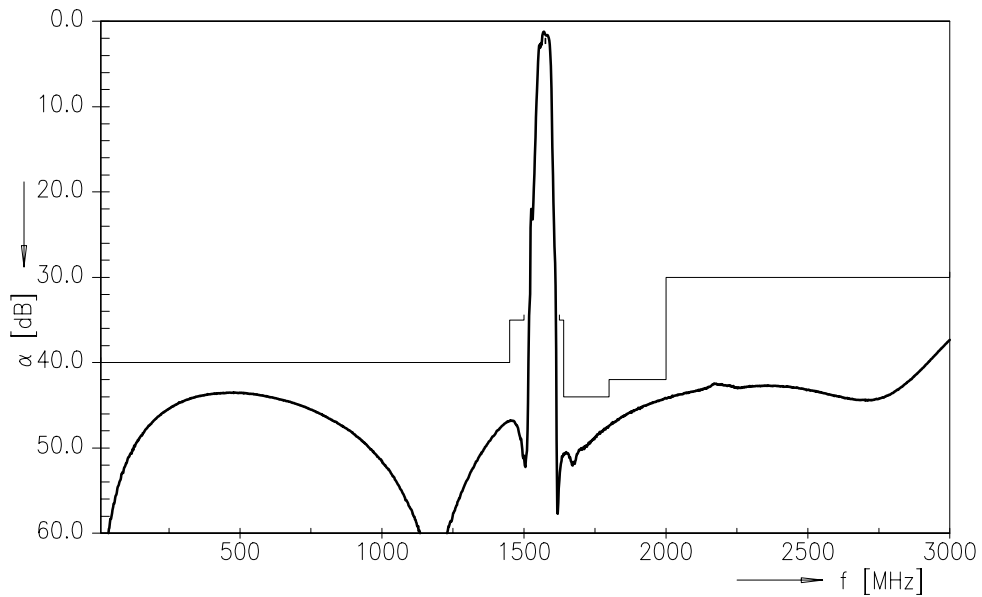
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Transfer function



Transfer function (wideband)



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References

Type	B3522
Ordering code	B39162B3522U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3522_NB.s2p B3522_WB.s2p
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.

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