



SAW Components

SAW IF filter

WiMAX

Series/type:	B5141
Ordering code:	B39521B5141U410
Date:	February 24, 2010
Version:	2.0



SAW Components

B5141

SAW IF filter

520.0 MHz

Data sheet



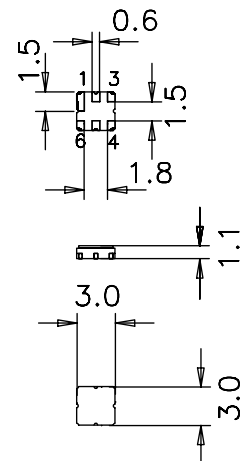
Application

- IF filter for WiMAX base stations
- Usable band width 30.5 MHz
- Small size
- No matching network required for operation at 50 Ω



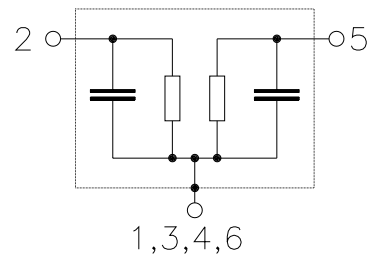
Features

- Package size 3.0 x 3.0 x 1.10 mm³
- Package code DCC6C
- RoHS compatible
- Approx. weight 0.037 g
- Ceramic package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- Filter surface passivated



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 Case grounded





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Characteristics

Operating temperature range:	$T = -40 \text{ to } 85 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 50 \text{ } \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	520.0	—	MHz
Minimum insertion attenuation					
	$f_N \pm 15.25 \text{ MHz}$	$\alpha_{\min}$	1.8	2.3	dB
Amplitude ripple (p-p)					
	$f_N \pm 15.25 \text{ MHz}$	$\Delta\alpha$	1.0	1.5	dB
Return loss					
	$f_N \pm 15.25 \text{ MHz}$	8.0	11.0	—	dB
Absolute attenuation					
		α			
100.0 MHz ... 440.0 MHz		35	55	—	dB
440.0 MHz ... 460.0 MHz		30	45	—	dB
460.0 MHz ... 475.0 MHz		15	25	—	dB
565.0 MHz ... 605.0 MHz		15	20	—	dB
605.0 MHz ... 615.0 MHz		30	50	—	dB
615.0 MHz ... 1000.0 MHz		35	45	—	dB

Maximum ratings

Operable temperature range	T	$-40/+85$	$^{\circ}\text{C}$	
Storage temperature range	T_{std}	$-40/+85$	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power	P_{IN}	10	dBm	



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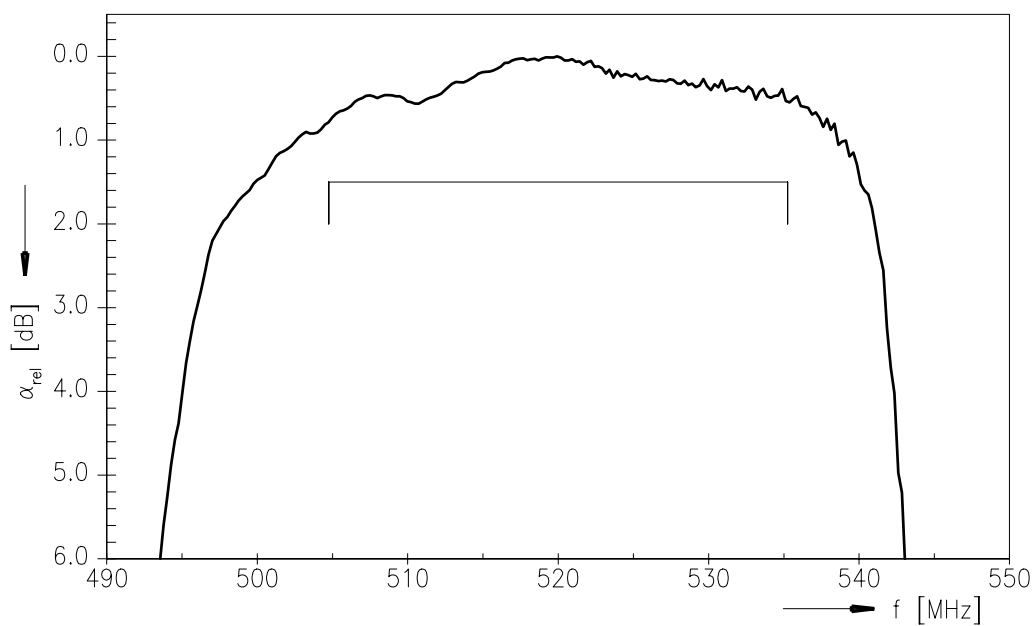
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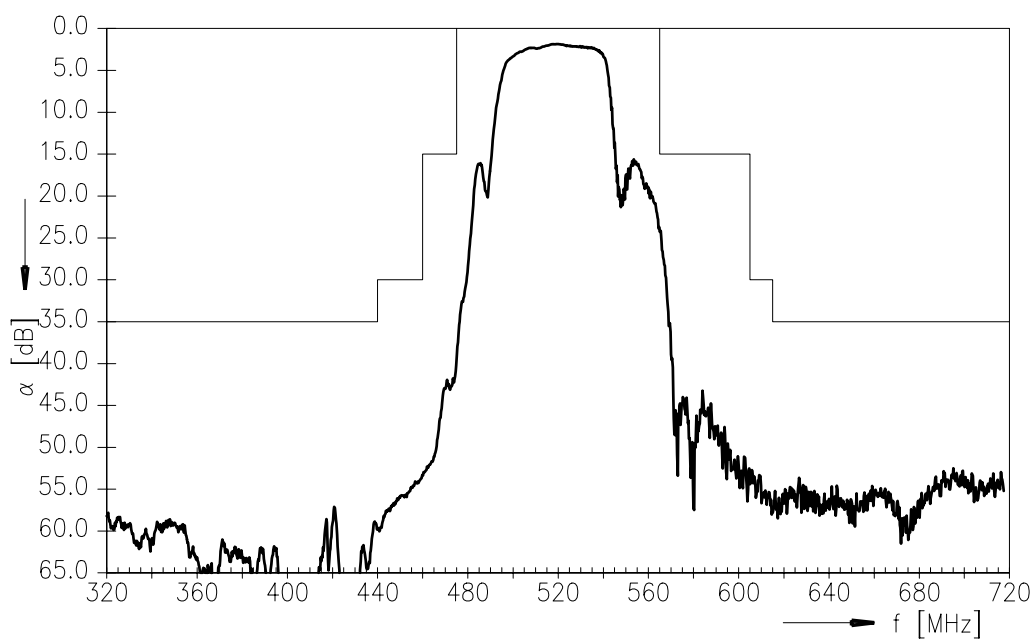
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Transfer function (normalized)



Transfer function (stop band)



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

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**References**

Type	B5141
Ordering code	B39521B5141U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	
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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Please read *cautions and warnings and important notes* at the end of this document.

5 February 24, 2010



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