



SAW Components

SAW IF Filter for Base Stations

WiMax

Series/type:	B5106
Ordering code:	B39521B5106U410
Date:	January 13, 2009
Version:	2.0

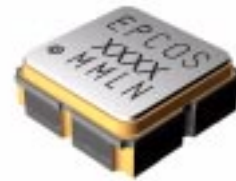


Data-sheet



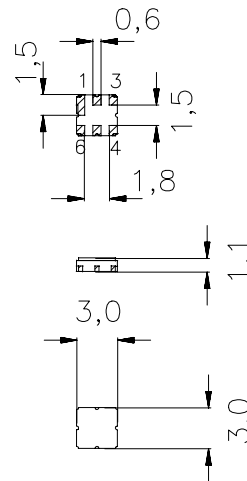
Application

- IF filter for WiMax base station
- Low ripple
- Small size
- Single ended operation on 50 Ω



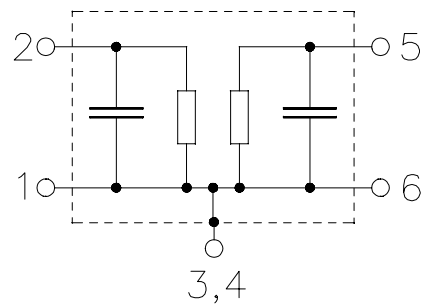
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approx. weight 0.037 g
- 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 ground



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



SAW Components	B5106
SAW IF Filter	520.0 MHz

Data-sheet



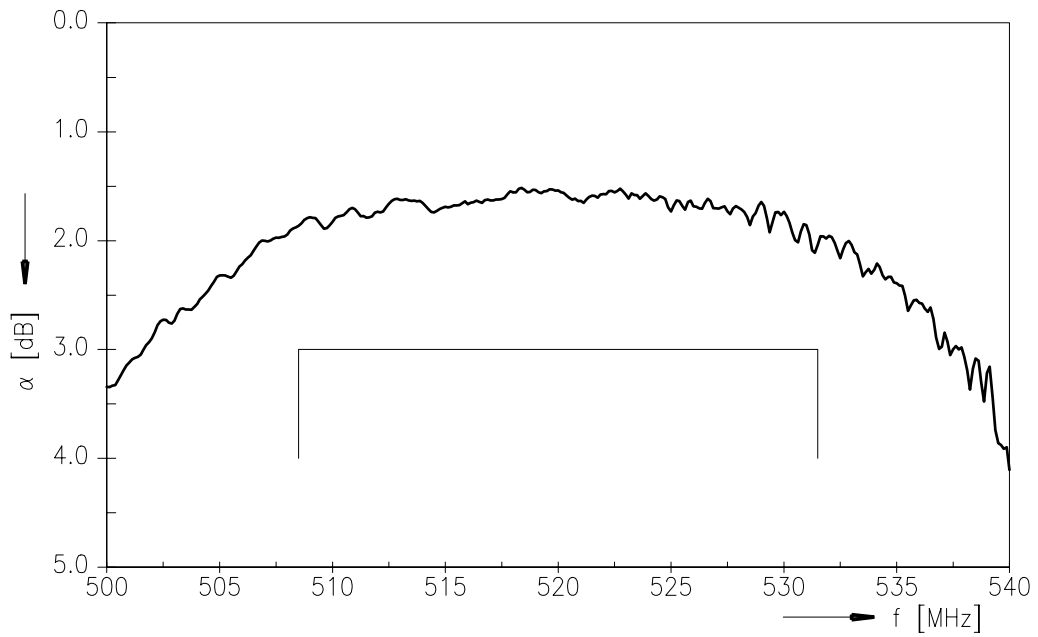
Characteristics

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

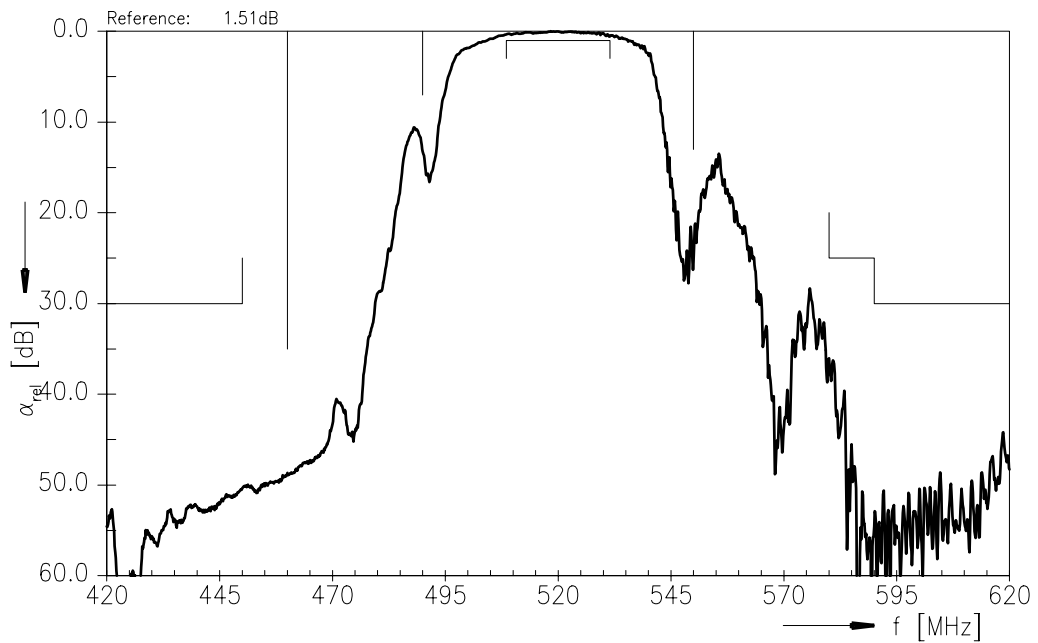
		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	520	—	MHz
Maximum insertion attenuation	α_{max}				
	$f_N \pm 11.5$ MHz	—	2.2	3.0	dB
Group delay ripple (p-p)	$\Delta\tau$				
	$f_N \pm 11.5$ MHz	—	0.040	—	µs
Amplitude ripple (p-p)	$\Delta\alpha$				
	$f_N \pm 11.5$ MHz	—	0.6	1.0	dB
Relative attenuation (relative to α_{min})	α_{rel}				
	$f_N \pm 11.5$ MHz	1.0	0.6	—	dB
	$f_N - 30.0$ MHz	7.0	13.0	—	dB
	$f_N + 30.0$ MHz	13.0	19.0	—	dB
	460.0 MHz	35.0	48.0	—	
	10.0 ... 450.0 MHz	30.0	48.0	—	dB
	580.0 ... 590.0 MHz	25.0	36.0	—	dB
	590.0 ... 1100.0 MHz	30.0	43.0	—	dB
Return loss					
	$f_N \pm 11.5$ MHz	10.0	16.0	—	dB
Temperature coefficient of frequency	TC_f	—	-64	—	ppm/K



Transfer function

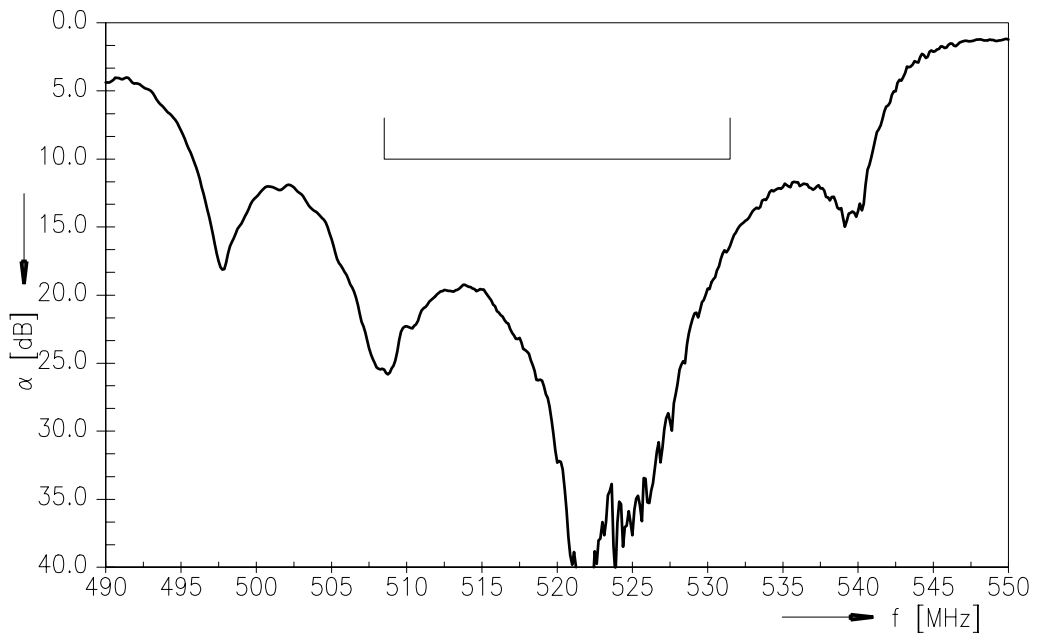


Transfer function (wideband)

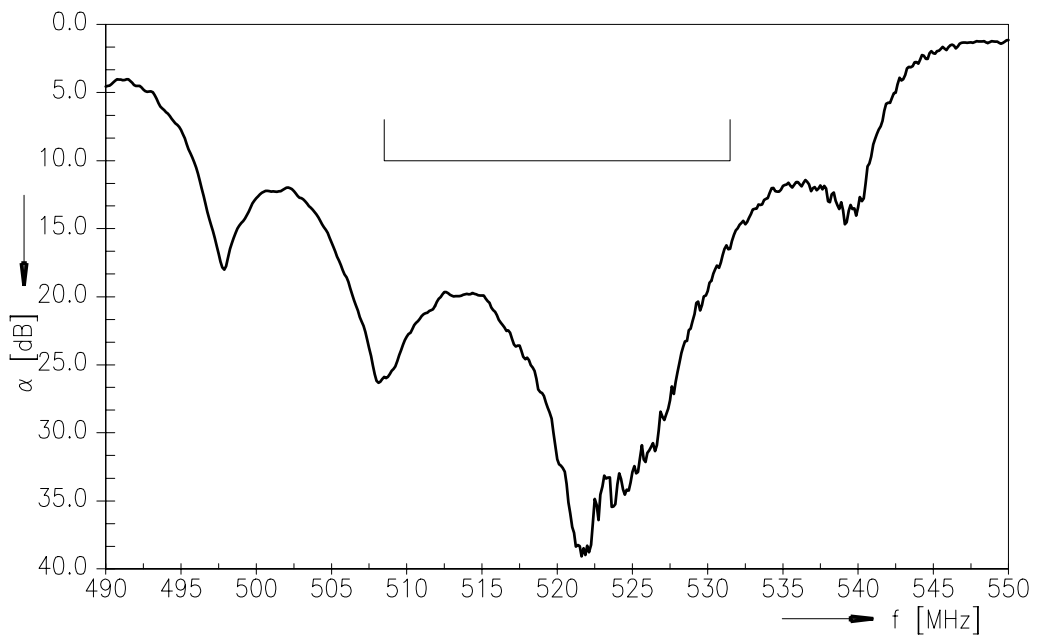




Return Loss Input



Return Loss Output





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Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{sta}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
Input power	P _{IN}	15	dBm	



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B5106

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References

Type	B5106
Ordering code	B39521B5106U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date code	L_1126
S-parameters	LI30B_NB.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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