



SAW Components

SAW IF filter

TD-SCDMA

Series/type:	B5062
Ordering code:	B39960B5062H310
Date:	June 16, 2008
Version:	2.0



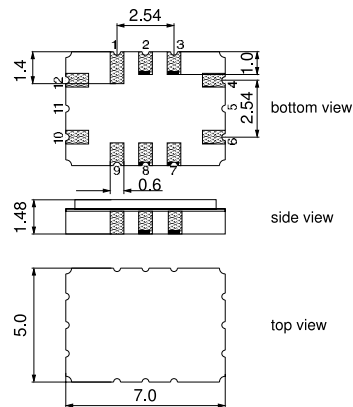
Application

- Low-loss IF filter for TD-SCDMA base station
- Unbalanced or balanced operation possible
- High stopband suppression
- Usable passband 20.0 MHz



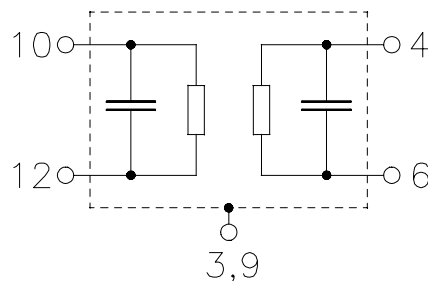
Features

- Package size 7.0 x 5.0 x 1.48 mm³
- Package code QCC12C
- RoHS compatible
- Approximate weight 0.25 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- Filter surface passivated



Pin configuration

- 10 Input
- 12 Input ground
- 4 Output
- 6 Output ground
- 1, 2, 7, 8 To be grounded
- 3, 9 Case ground





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96.0 MHz

Data sheet



Characteristics

Temperature range for specification: $T = -40\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ and matching network
 Terminating load impedance: $Z_L = 50\ \Omega$ and matching network
 Group delay aperture: 200 kHz

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	96.0	—	MHz
Minimum insertion attenuation (including matching network)	α_{\min}	—	8.0	9.0	dB
Passband width	$\alpha_{\text{rel}} \leq 1.4\text{ dB}$ $B_{1,4\text{dB}}$	20	21.8	—	MHz
Amplitude ripple (p-p)	$\Delta\alpha$ $f_N \pm 10.0\text{ MHz}$	—	1.0	1.4	dB
Group delay ripple (p-p)	$\Delta\tau$ $f_N \pm 10.0\text{ MHz}$	—	100	150	ns
Relative attenuation (relative to α_{\min})	α_{rel}				
	10.0 MHz ... 68.4 MHz	55	60	—	dB
	76.8 MHz	40	45	—	dB
	123.6 MHz ... 162.8 MHz	55	60	—	dB
	162.8 MHz ... 1.0 GHz	35	50	—	dB
Return loss					
	Input $f_N \pm 10.0\text{ MHz}$	—	7	—	dB
	Output $f_N \pm 10.0\text{ MHz}$	—	8	—	dB
1 dB compression point		12	—	—	dBm
Input IP3		35	—	—	dBm
Temperature coefficient of frequency	TC_f	—	-78	—	ppm/K



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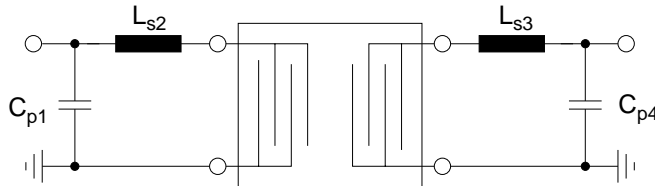
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Matching network to 50 Ω



- $C_{p1} = 33 \text{ pF}$
- $L_{s2} = 180 \text{ nH}$
- $L_{s3} = 270 \text{ nH}$
- $C_{p4} = 22 \text{ pF}$

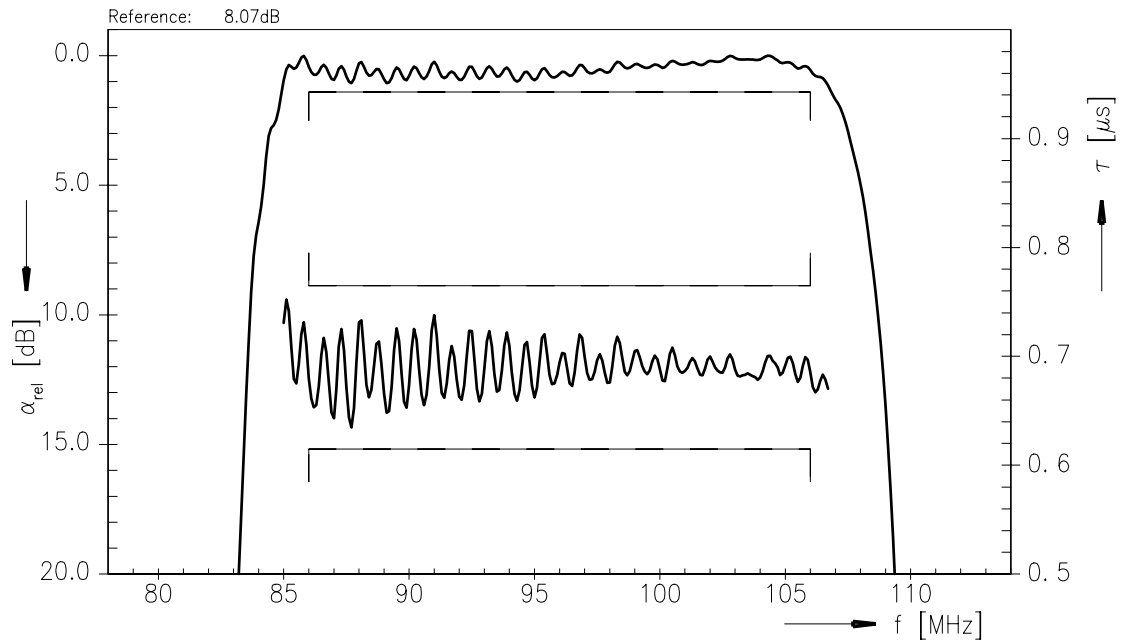
(Element values depend upon board layout and properties)

Maximum ratings

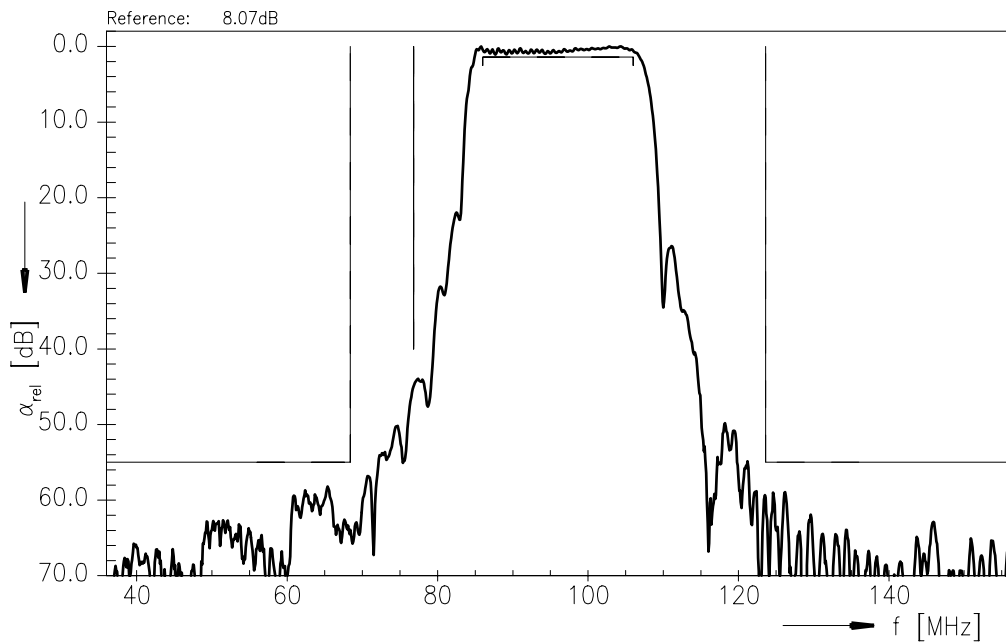
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	5	V	
Input Power	P _{IN}	12	dBm	



Transfer function (S21, Narrowband)



Transfer function (S21, Wideband)





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SAW IF filter **96.0 MHz**

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References

Type	B5062
Ordering code	B39960B5062H310
Marking and package	C61157-A7-A94
Packaging	F61074-V8163-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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