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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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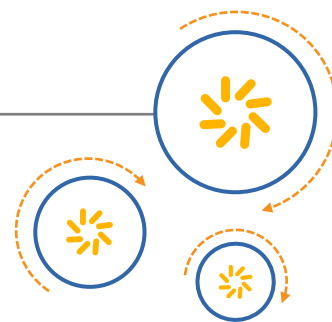
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RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW RF filter

Radiolink

Series/type:	B5156
Ordering code:	B39212B5156U410
Date:	June 29, 2011
Version:	2.0

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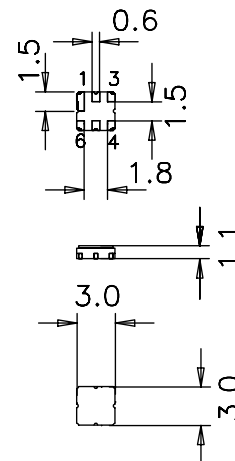
Data sheet

Application

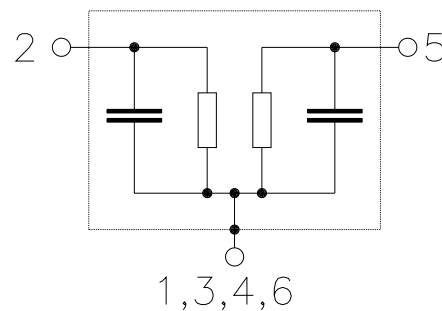
- RF filter for Radiolink-MPR
- Unbalanced to Unbalanced operation
- Low amplitude ripple
- Usable passband of 35 MHz
- No matching required for operation at 50Ω


Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Ceramic Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)
- **Moisture Sensitive Level 1**
- Filter surface passivated


Pin configuration

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



Data sheet


Characteristics

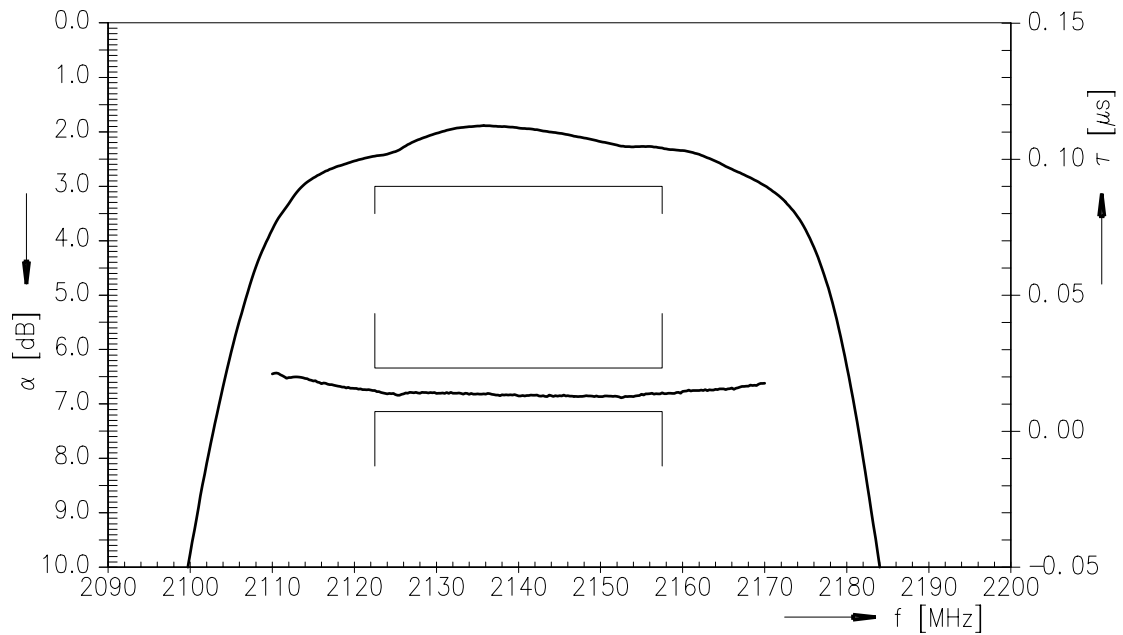
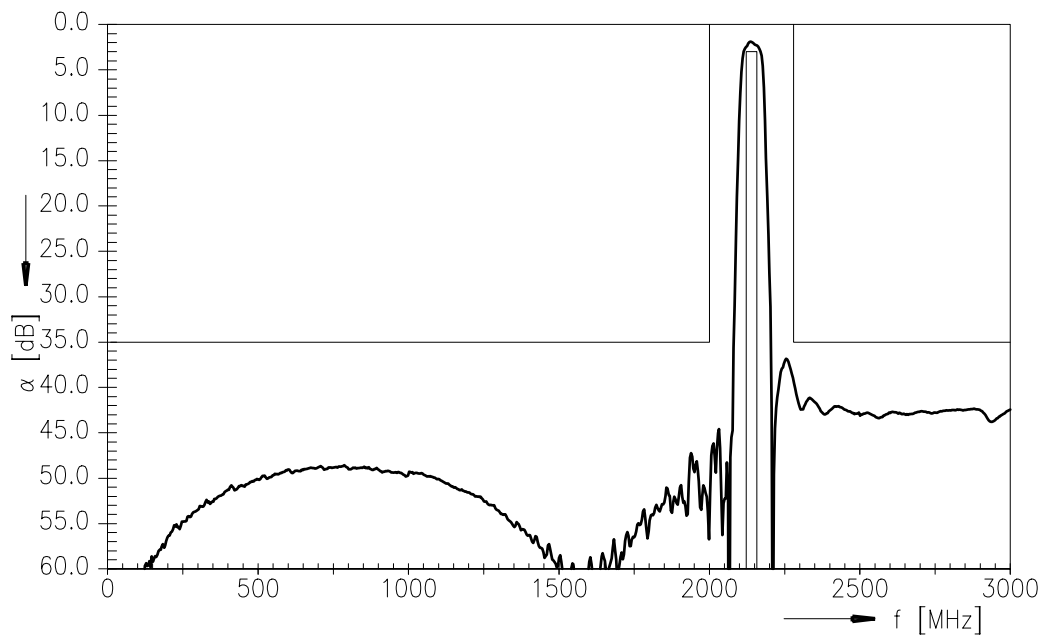
Temperature range for specification: $T = -40\text{ }^{\circ}\text{C to }+85\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	2140.0	—	MHz
Maximum insertion attenuation	α_{\max}				
2122.5 ... 2157.5 MHz		—	2.5	3.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2122.5 ... 2157.5 MHz		—	0.6	1.0	dB
Group delay ripple (p-p)	$\Delta\tau$				
2122.5 ... 2157.5 MHz		—	2	16	ns
Return loss					
Input 2122.5 ... 2157.5 MHz		10	15	—	dB
Output 2122.5 ... 2157.5 MHz		10	14	—	dB
Attenuation	α				
1.0 ... 2000.0 MHz		35	47	—	dB
2280.0 ... 3000.0 MHz		35	39	—	dB


Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power at 2122.5 ... 2157.5 MHz	P _{IN}	7	dBm	10000hrs , Continuous wave +85 °C

¹⁾ acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulse.

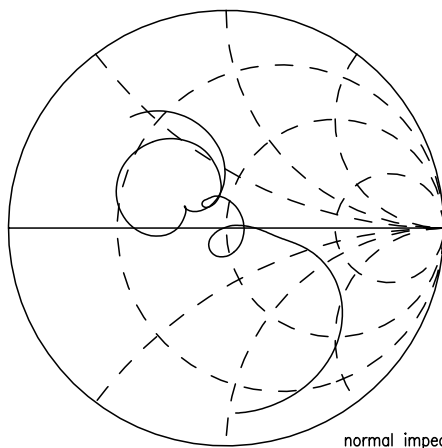
Transfer function (narrow band)

Transfer function (wideband)


Data sheet

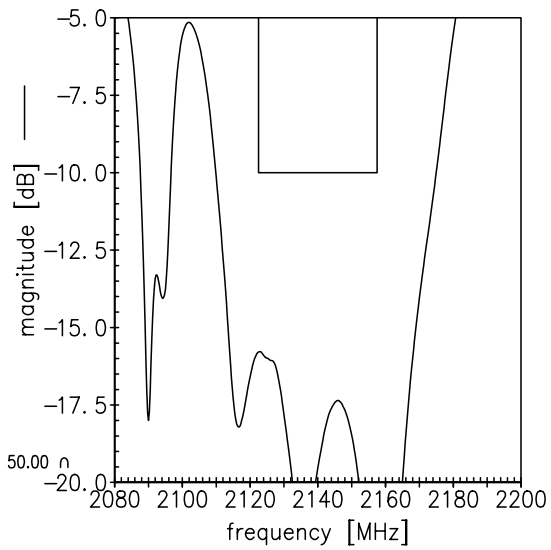


Smith charts

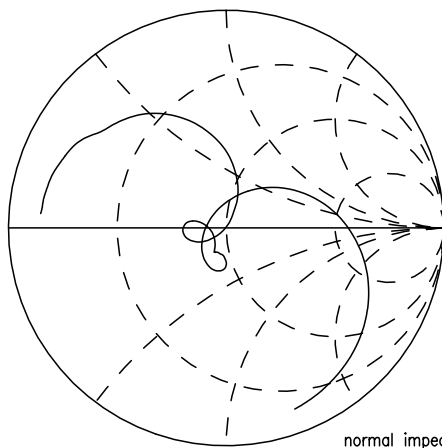
S₁₁ function



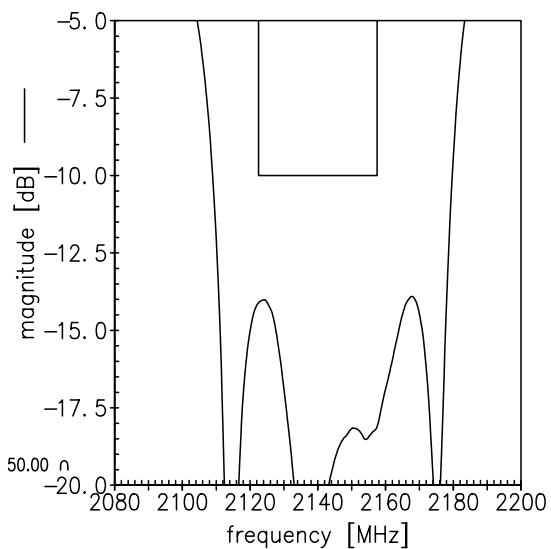
normal impedance: 50.00 Ω



S₂₂ function



normal impedance: 50.00 Ω



SAW Components	B5156
SAW RF filter	2140.00 MHz

Data sheet



References

Type	B5156
Ordering code	B39212B5156U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5156_NB.s2p B5156_WB.s2p See file header for port/pin assignment table
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."
Matching coils	See Inductor pdf-catalog http://www.tdk.co.jp/tefe02/coil.htm#aname1 and Data Library for circuit simulation http://www.tdk.co.jp/etvcl/index.htm

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