

SAW Components

SAW RF filter

Radiolink

Series/type: B5157

Ordering code: B39112B5157U410

Date: May 12, 2011

Version: 2.1

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SAW Components B5157

SAW RF filter 1080.0 MHz

Datasheet



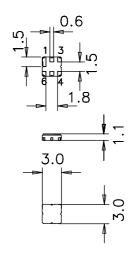
Application

- RF filter for Radiolink-MPR
- Low amplitude ripple
- Usable band width 30 MHz
- No matching required for operation at 50 Ω



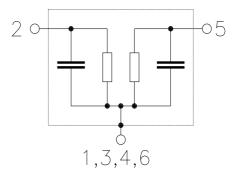
Features

- Package size 3.0 x3.0 x 1.10 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)
- Filter surface passivated



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded





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Characteristics

Temperature range for specification: $T = -40 ^{\circ}C \text{ to } +85 ^{\circ}C$

 $Z_S = Z_L =$ Terminating source impedance: 50Ω Terminating load impedance: $50\,\Omega$

	min.	typ. @ 25 °C	max.	
Nominal frequency f _N	_	1080.0	_	MHz
$\begin{array}{cccc} \textbf{Maximum insertion attenuation} & \alpha_{n} \\ & 1065 \dots 1095 & \text{MHz} \end{array}$	max —	1.6	3.0	dB
Amplitude ripple (p-p) Δα 1065 1095 MHz	α <u> </u>	0.7	1.0	dB
Group delay ripple (p-p) Δτ 1065 1095 MHz	T	12	30	ns
VSWR (input / output) 1065 1095 MHz	_	2.0	2.2	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	30 30 27	40 40 35	_ _ _	dB dB dB

Maximum ratings

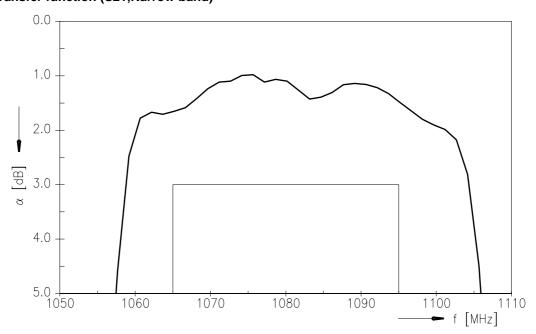
Operable temperature range	Т	-40/+85	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power at 1065 - 1095 MHz	P_IN	10	dBm	CW

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

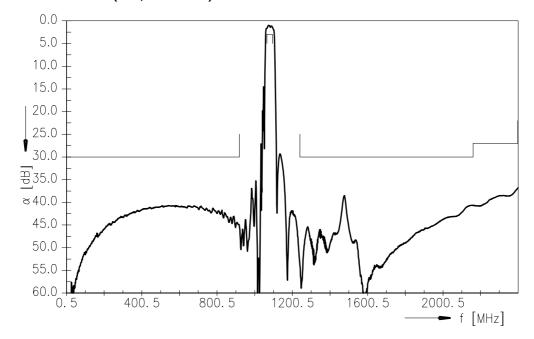




Transfer function (S21,Narrow band)



Transfer function (S21,Wide band)





SAW Components		B5157
SAW RF filter		1080.0 MHz
Datasheet	SMD	

References

Туре	B5157
Ordering code	B39112B5157U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5157_WB.S2P See file header for port/in 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

For further information please contact your local EPCOS sales office or visit our webpage at $\underline{www.epcos.com}$.

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