



RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

## SAW Components

### SAW Rx filter

Satellite Communications

Series/type:	B5072
Ordering code:	B39202B5072U410
Date:	August 28, 2008
Version:	2.1

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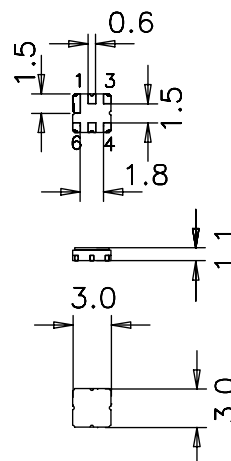
Data sheet


**Application**

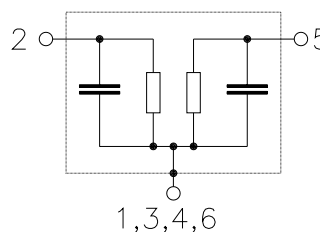
- Low-loss RF filter for base station  
Satellite Communication systems, receive path (Rx)
- Unbalanced to unbalanced operation
- No external matching required
- Low amplitude ripple
- Usable passband 20 MHz


**Features**

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**


**Pin configuration**

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



Data sheet


**Characteristics**

Temperature range for specification:  $T = -10\text{ °C to }+85\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b>	$f_C$	—	2010.00	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	2.6	3.0	dB
2000.0 ... 2020.0 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0.5	1.0	dB
2000.0 ... 2020.0 MHz					
<b>Return Loss</b>		10.0	13.3	—	dB
2000.0 ... 2020.0 MHz					
<b>Attenuation</b>	$\alpha$				dB
50.0 ... 1500.0 MHz		20	43	—	
1500.0 ... 1940.0 MHz		30	37	—	
2080.0 ... 3000.0 MHz		27	29	—	
3000.0 ... 5000.0 MHz		18	21	—	
5000.0 ... 6000.0 MHz		10	12	—	


**Maximum ratings**

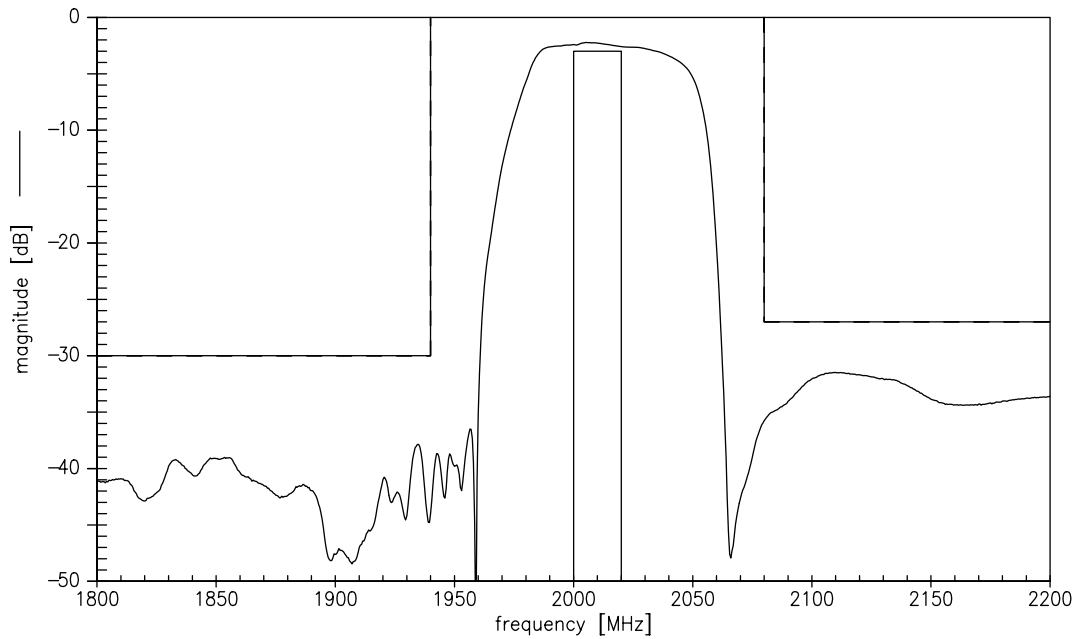
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T <sub>stg</sub>	-40/+85	°C	
DC voltage	V <sub>DC</sub>	5	V	
ESD voltage	V <sub>ESD</sub>	50 <sup>1)</sup>	V	machine model, 1 pulse
Input power at 2000.0 ... 2020.0 MHz	P <sub>IN</sub>	7.0	dBm	CW

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

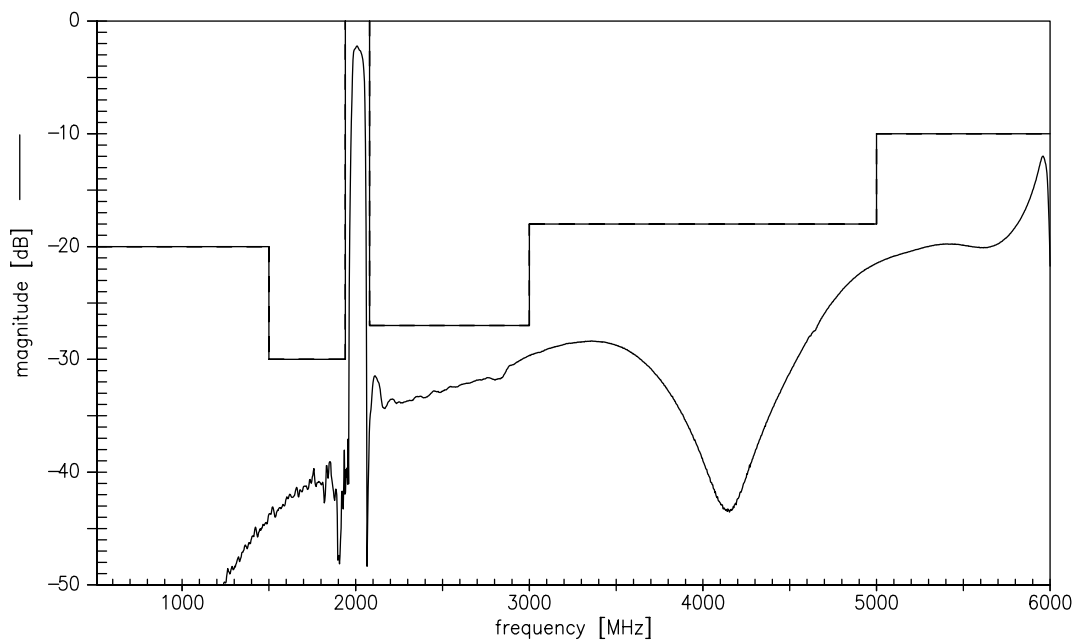
Data sheet



Transfer function



Transfer function (wideband)



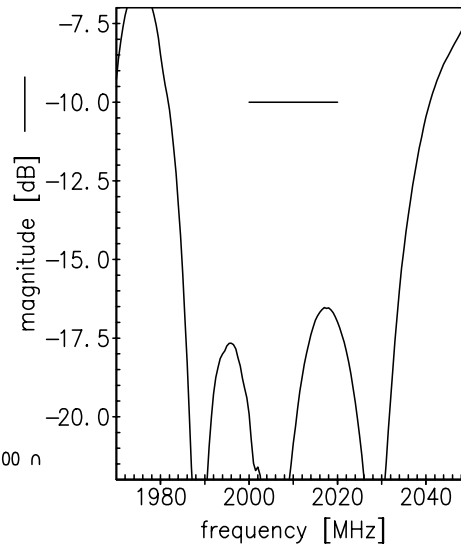
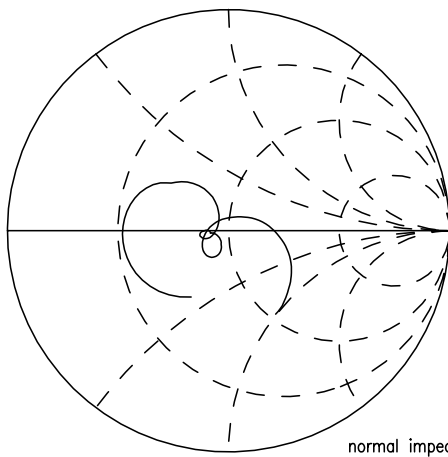
Please read *cautions and warnings and important notes* at the end of this document.

Data sheet

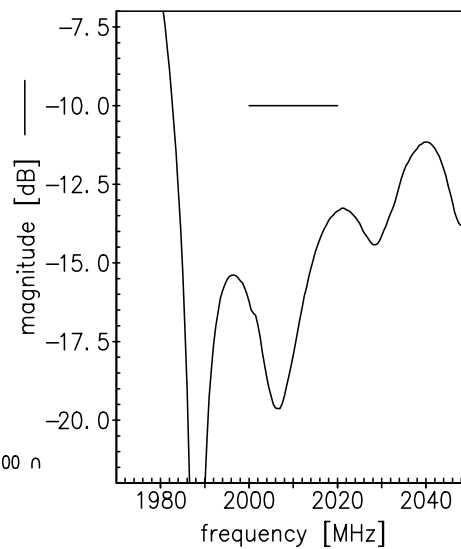
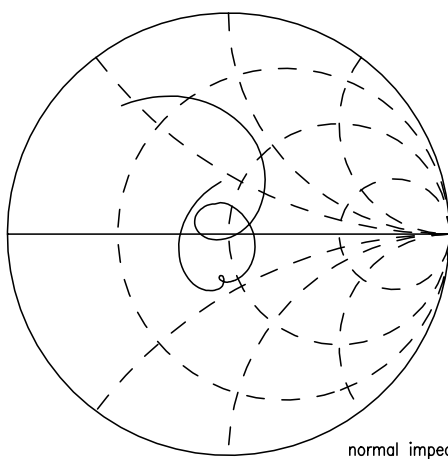


Smith charts

$S_{11}$  function



$S_{22}$  function






**References**

<b>Type</b>	B5072
<b>Ordering code</b>	B39202B5072U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B5072_NB.s2p B5072_WB.s2p
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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."

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