



## **SAW Components**

### **SAW filter**

Short range devices

<b>Series/type:</b>	<b>B4041</b>
<b>Ordering code:</b>	<b>B39252B4041U410</b>
<b>Date:</b>	<b>April 20, 2007</b>
<b>Version:</b>	<b>2.2</b>



Data sheet



**Application**

- Low-loss RF filter for ISM 2450 MHz
- Low amplitude ripple
- Usable passband 97 MHz
- No matching network required for operation at 50 Ω



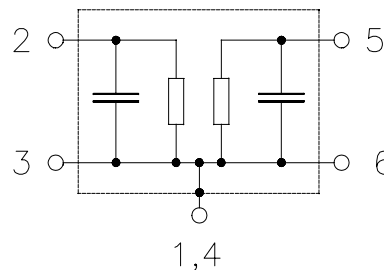
**Features**

- 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
- Lead free soldering compatible with J - STD20C
- **Electrostatic Sensitive Device (ESD)**



**Pin configuration**

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



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



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**B4041**

**SAW filter**

**2450.00 MHz**

Data sheet



**Characteristics**

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

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b>	$f_C$	—	2448.50	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	2.9	4.0	dB
2400.00 ... 2497.00 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	1.4	2.7	
2400.00 ... 2497.00 MHz					
<b>Attenuation</b>	$\alpha$				
50.00 ... 1785.00 MHz		15.0	19.0	—	dB
1785.00 ... 2100.00 MHz		18.0	22.0	—	dB
2100.00 ... 2300.00 MHz		24.0	28.0	—	dB
2600.00 ... 2800.00 MHz		22.0	26.0	—	dB
2800.00 ... 3100.00 MHz		24.0	28.0	—	dB
3100.00 ... 4200.00 MHz		20.0	25.0	—	dB
4200.00 ... 5000.00 MHz		7.0	10.0	—	dB

**Maximum ratings**

Operable temperature range	$T_A$	-45/+125	°C	
Storage temperature range	$T_{\text{stg}}$	-45/+125	°C	
DC voltage	$V_{\text{DC}}$	0	V	
Input power max.	$P_{\text{IN}}$	7.5	dBm	source impedance 50 $\Omega$



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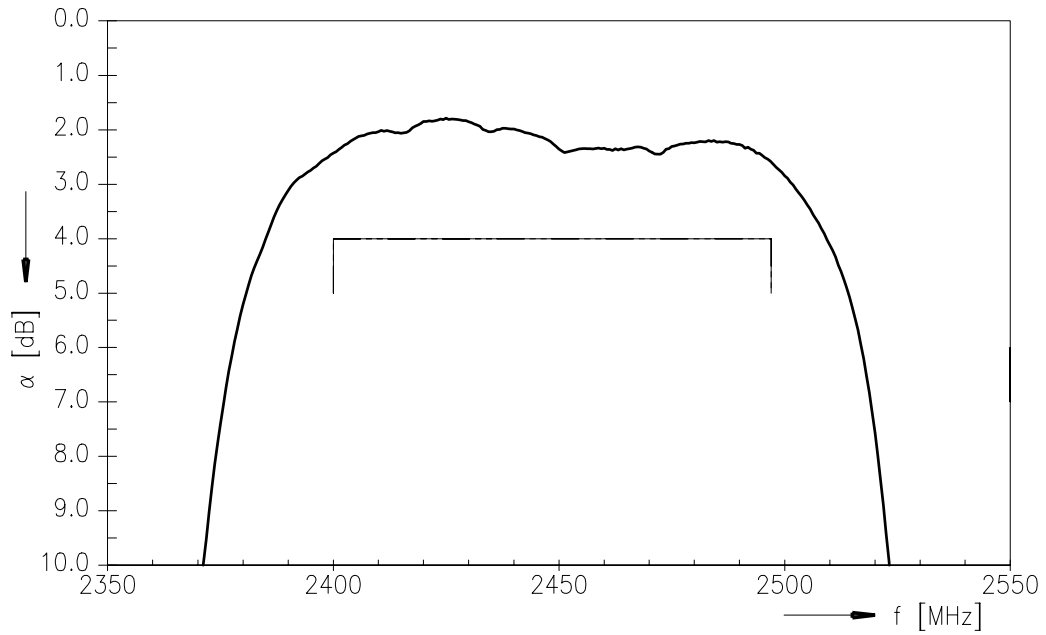
SAW filter

2450.00 MHz

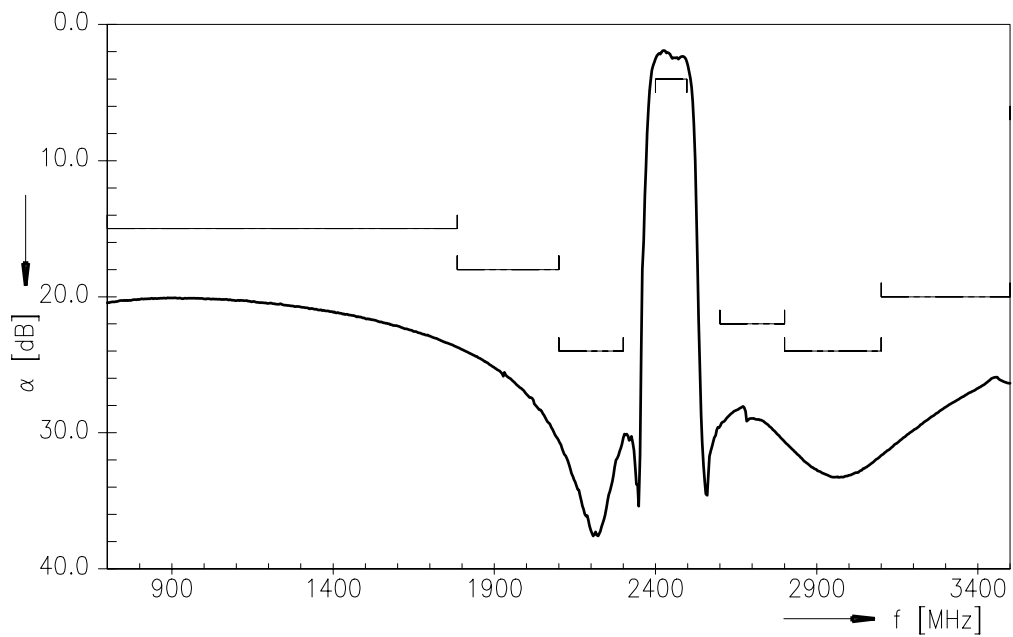
Data sheet



Transfer function (passband)



Transfer function



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



SAW Components

B4041

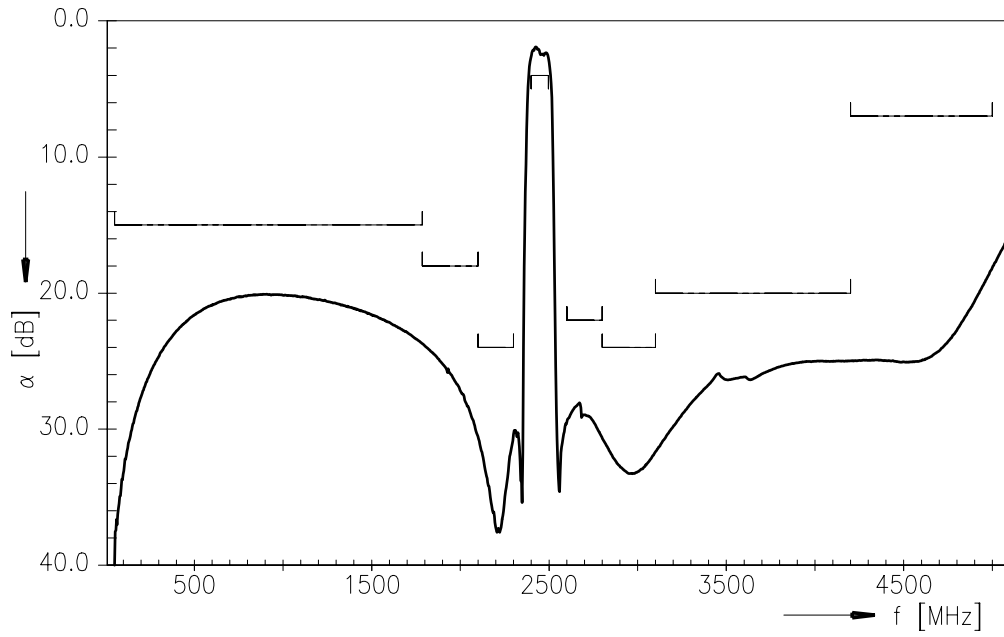
SAW filter

2450.00 MHz

Data sheet



Transfer function (wideband)





**SAW Components** **B4041**

**SAW filter** **2450.00 MHz**

Data sheet



### References

<b>Type</b>	B4041
<b>Ordering code</b>	B39252B4041U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B4041_SB.s2p B4041_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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**Published by EPCOS AG  
Surface Acoustic Wave Components Division  
P.O. Box 80 17 09, 81617 Munich, GERMANY**

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



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