SAW Components

SAW filter

Short range devices

Series/type:	**B4041**
Ordering code:	**B39252B4041U410**
Date:	November 10, 2006
Version:	2.1

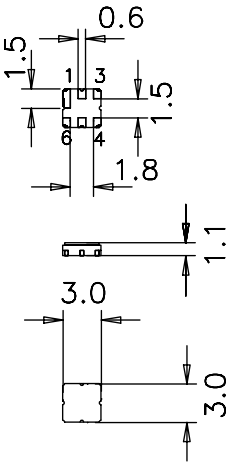
Data sheet

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

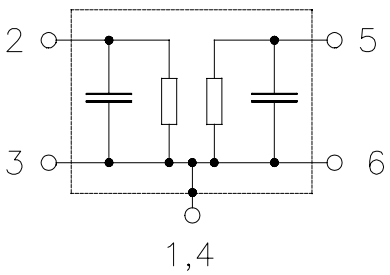
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration

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



Data sheet SMD

Characteristics

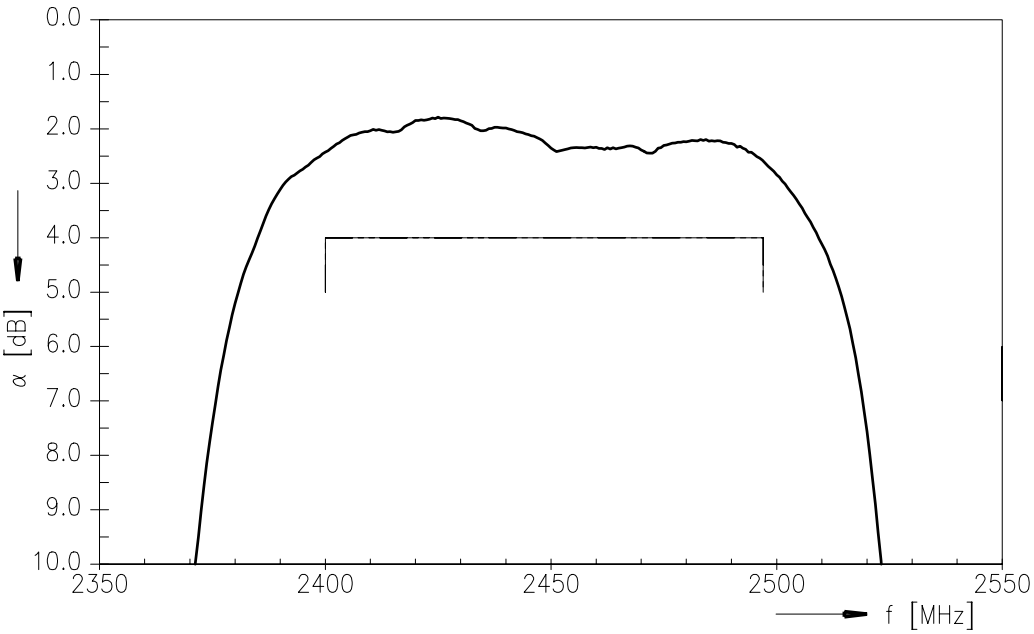
Temperature range for specification: T_A = –40 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	2448.50	—	MHz
Maximum insertion attenuation	α_{max}				
2400.00 ...24970.00 MHz		—	2.9	4.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400.00 ... 2497.00 MHz		—	1.4	2.7	dB
Attenuation	α				
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

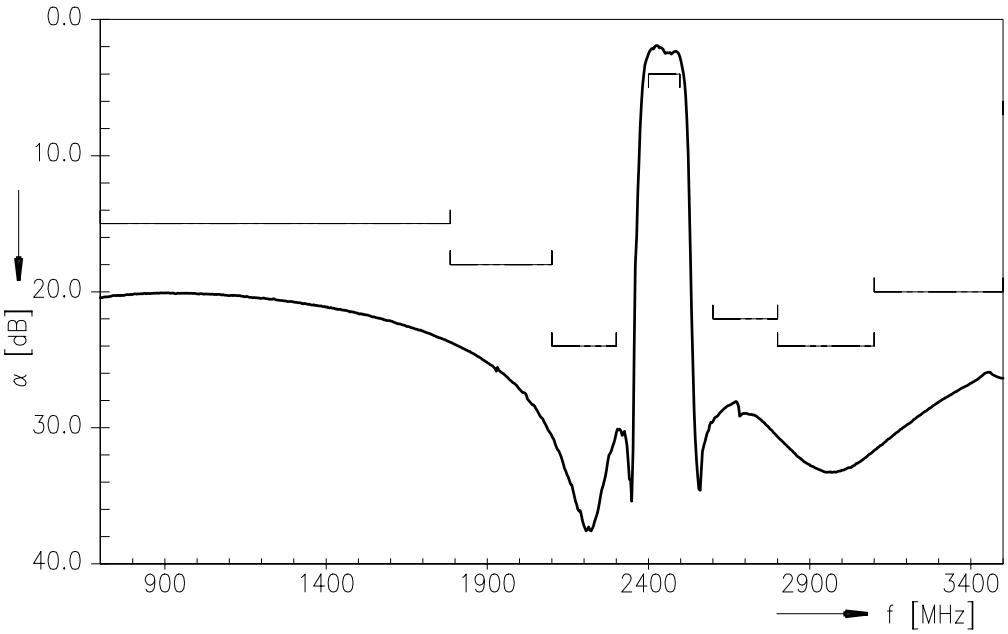
Maximum ratings

Operable temperature range	T_A	–40/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	7.5	dBm	source impedance 50 Ω

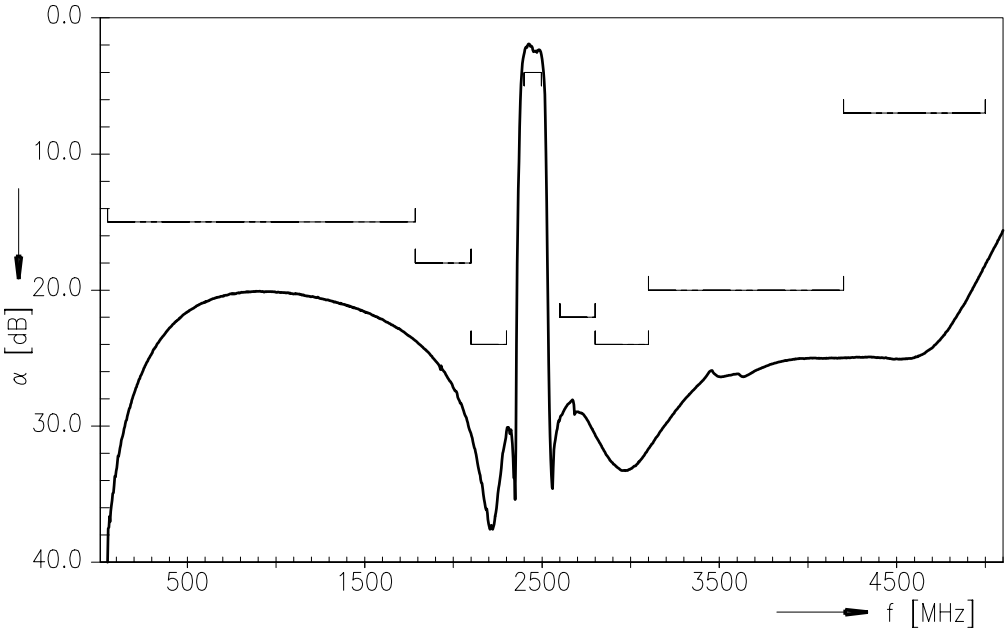
Transfer function (passband)



Transfer function



Transfer function (wideband)



References

Type	B4041
Ordering code	B39252B4041U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B4041_SB.s2p B4041_WB.s2p
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."

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