



SAW Components

SAW RF filter

Short Range Devices

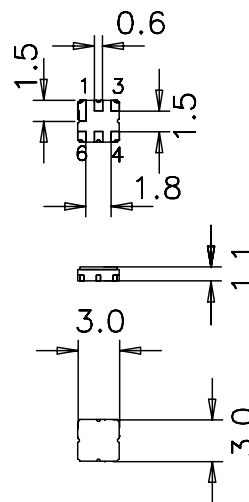
Series/type:	B3907
Ordering code:	B39451B3907U410
Date:	April 19, 2010
Version:	2.0

Application

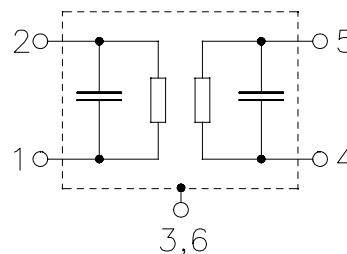
- Low-loss RF filter for short range devices.
- Low amplitude ripple
- Usable passband 1.6 MHz
- No matching network required for operation at 50 Ω


Features

- Package size 3.0 x3.0 x 1.1 mm³
- 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
- Passivation layer ELPAS
- AEC-Q200 qualified component family
- **Electrostatic Sensitive Device (ESD)**


Pin configuration

- 2 Input
- 5 Output
- 1, 4 Ground
- 3, 6 Ground (case)



Data sheet

Characteristics

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

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	447.7	—	MHz
Maximum insertion attenuation	α_{\max}	—	3.0	3.5	dB
446.90 ... 448.50 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.8	dB
446.90 ... 448.50 MHz					
Input VSWR		—	1.3	2.0	
446.90 ... 448.50 MHz					
Output VSWR		—	1.3	2.0	
446.90 ... 448.50 MHz					
Attenuation	α				
10.00 ... 393.78 MHz		55	64	—	dB
393.78 ... 437.20 MHz		45	52	—	dB
437.20 ... 441.20 MHz		28	32	—	dB
441.20 ... 443.20 MHz		7	16	—	dB
452.20 ... 458.20 MHz		5	14	—	dB
458.20 ... 473.78 MHz		30	35	—	dB
473.78 ... 1000.00 MHz		46	50	—	dB



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B3907

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447.70 MHz

Data sheet



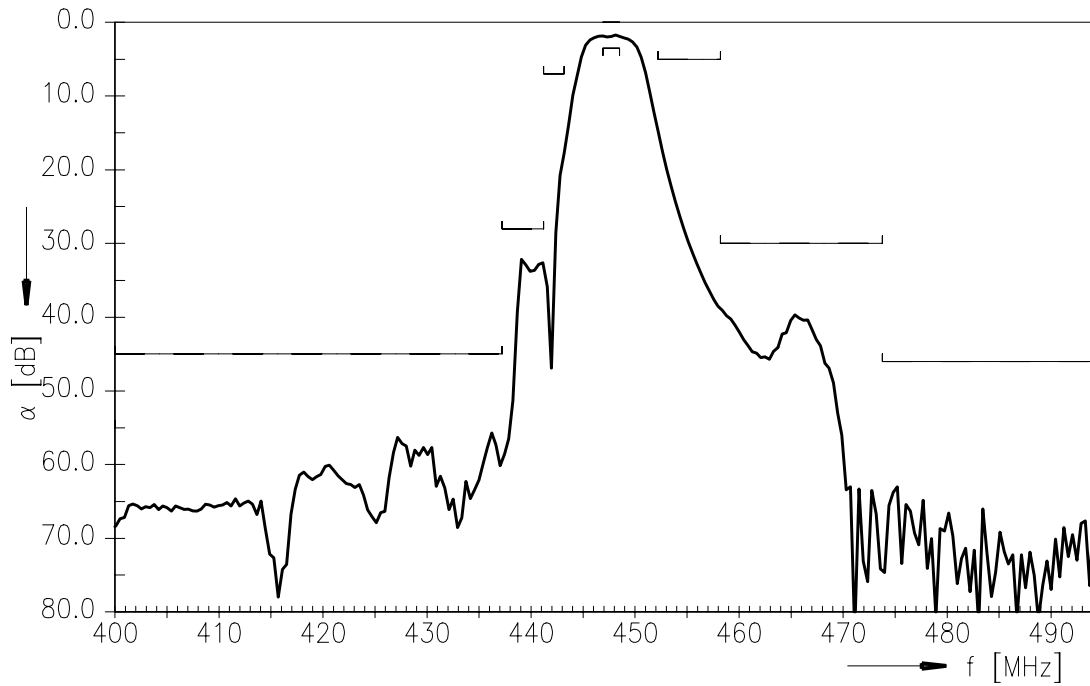
Maximum ratings

Operable temperature range	T	-40/+125	°C	
Storage temperature range	T _{stg}	-40/+125	°C	
DC voltage	V _{DC}	6	V	
Source power	P _S	10	dBm	source impedance 50 Ω

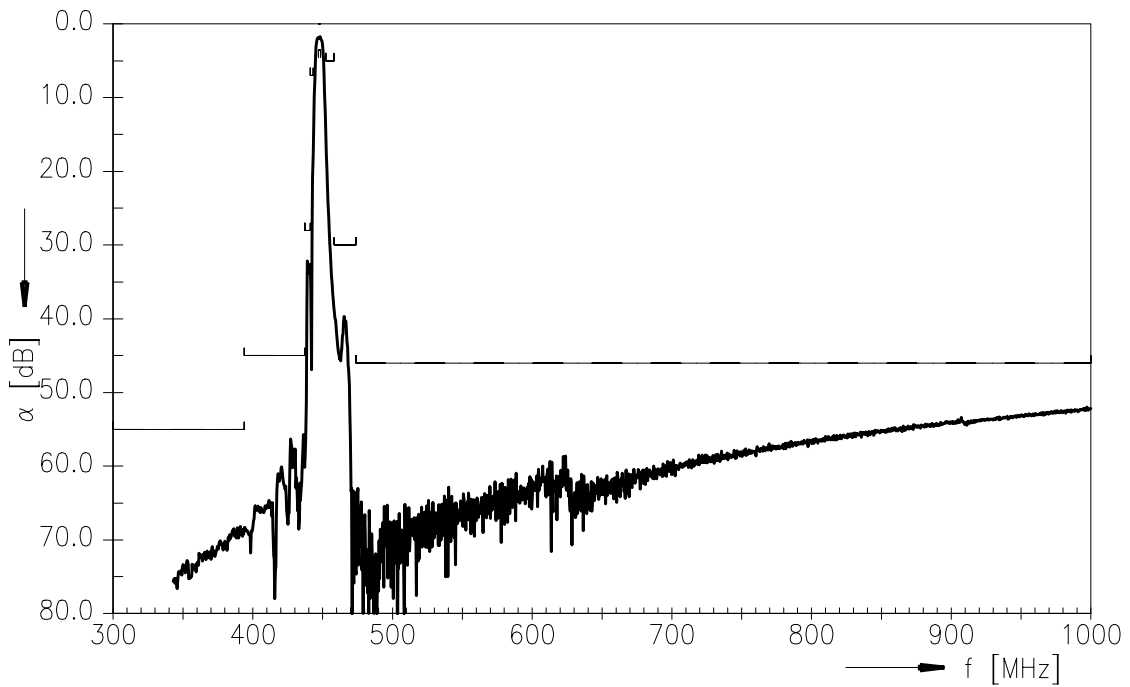
Data sheet

SMD

Frequency response (narrowband)



Frequency response (wideband)



**SAW Components****B3907****SAW RF filter****447.70 MHz**

Data sheet

**References**

Type	B3907
Ordering code	B39451B3907U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B3907_NB.s2p B3907_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."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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