



SAW Components

SAW RF filter

Short range devices

Series/type:	B3729
Ordering code:	B39311B3729H110
Date:	July 27, 2009
Version:	2.0



SAW Components

B3729

SAW RF filter

313.85 MHz

Data sheet



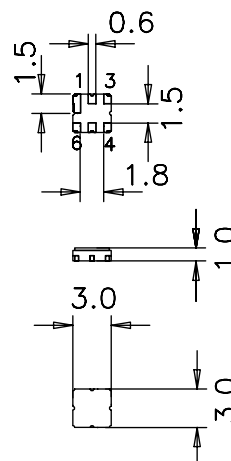
Application

- Low-loss RF filter for remote control receivers
- No matching network required for operation at 50 Ω



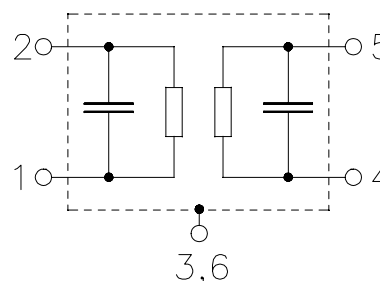
Features

- Package size 3.0 x 3.0 x 1.0 mm³
- Package code DCC6E
- 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 configuration¹⁾

- 1 Input (recommended) or input ground
- 2 Input ground (recommended) or input
- 4 Output (recommended) or output ground
- 5 Output ground (recommended) or output
- 3,6 Ground (case)



1) The recommended pin configuration usually offers best suppression of electrical crosstalk. The filter characteristics refer to this configuration.



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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	—	313.85	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	1.5	1.9	dB
	313.35 ... 314.35 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.0	dB
	313.35 ... 314.35 MHz				
Input VSWR		—	1.3	1.6	
	313.35 ... 314.35 MHz				
Output VSWR		—	1.3	1.6	
	313.35 ... 314.35 MHz				
Attenuation	α				
	270.00 ... 286.00 MHz	60	68	—	dB
	293.00 ... 293.90 MHz	56	64	—	dB
	302.85 ... 303.45 MHz	45	52	—	dB
	324.25 ... 324.85 MHz	29	31	—	dB
	336.10 ... 337.00 MHz	52	60	—	dB
	357.50 ... 358.70 MHz	55	63	—	dB



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Characteristics

Temperature range for specification: $T = -45\text{ °C to }+105\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	313.85	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	1.5	2.0	dB
313.35 ... 314.35 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.0	dB
313.35 ... 314.35 MHz					
Input VSWR		—	1.3	1.6	
313.35 ... 314.35 MHz					
Output VSWR		—	1.3	1.6	
313.35 ... 314.35 MHz					
Attenuation	α				
270.00 ... 286.00 MHz		60	68	—	dB
293.00 ... 293.90 MHz		56	64	—	dB
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Maximum ratings

Operable temperature range	T	−45/+125	°C	
Storage temperature range	T _{stg}	−45/+125	°C	
DC voltage	V _{DC}	6	V	
Source power	P _S	13	dBm	source impedance 50 Ω



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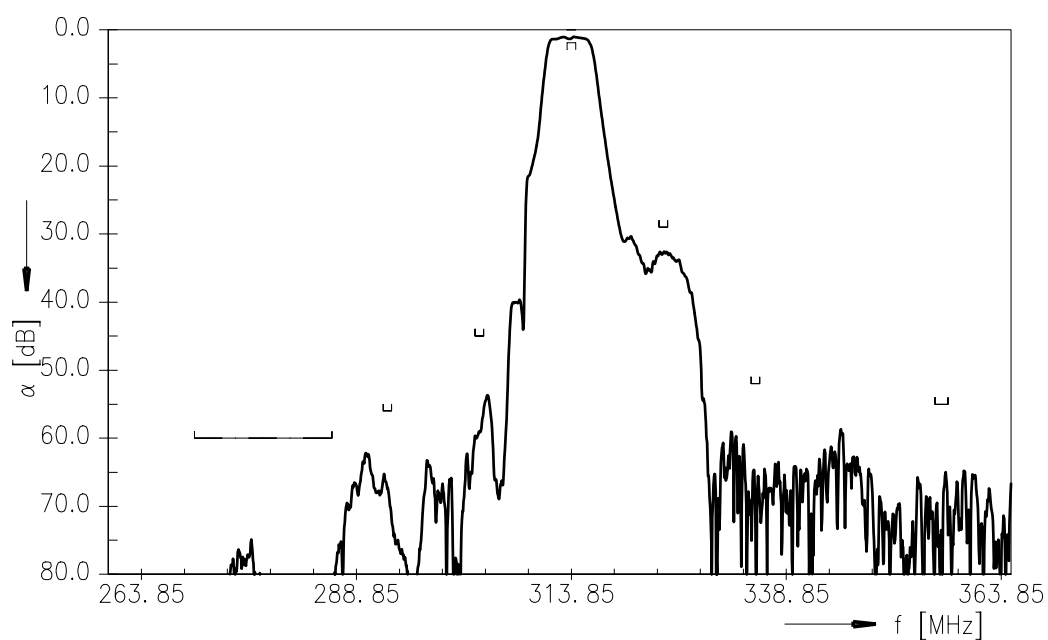
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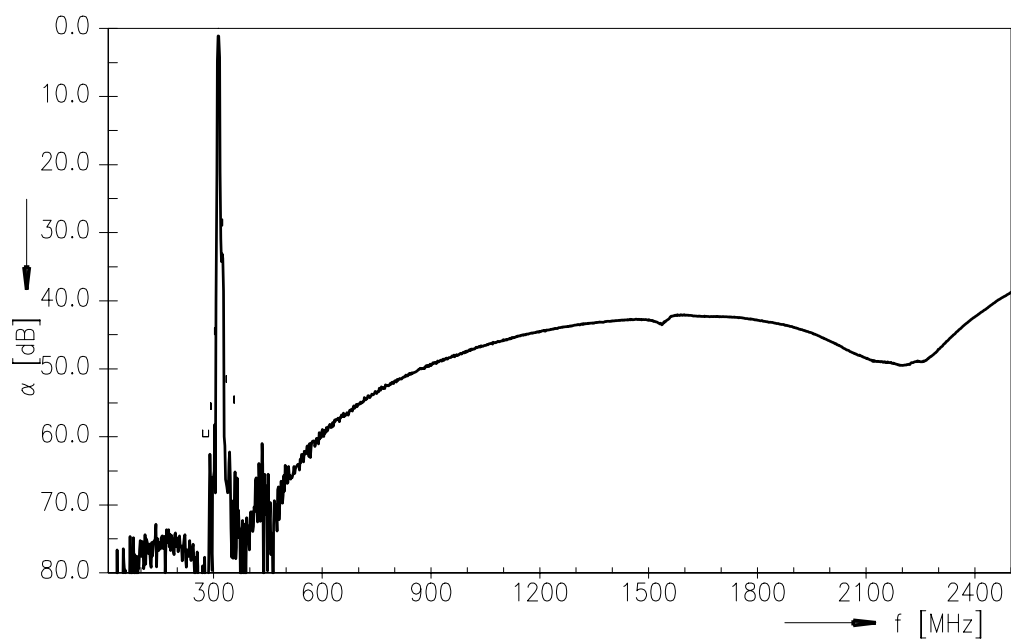
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Transfer function (wideband)



Transfer function (ultimate rejection)





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Data sheet	SMD

References

Type	B3729
Ordering code	B39311B3729H110
Marking and package	C61157-A7-A143
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B3729_NB.s2p B3729_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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