SAW Components

SAW filter

Short range devices

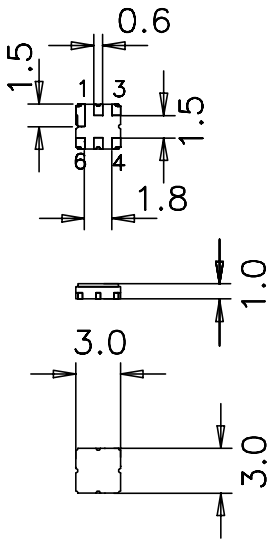
Series/type:	**B3719**
Ordering code:	**B39321B3719H110**
Date:	August 26, 2010
Version:	2.1

Application

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

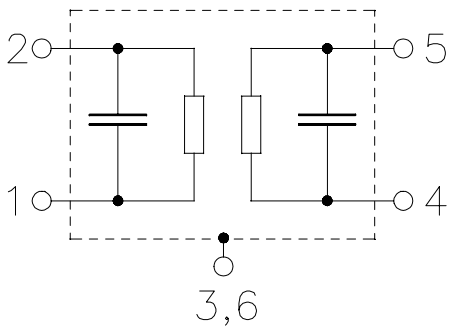
Features

- Package size 3.0 x 3.0 x 1.0 mm³
- Package code DCC6E
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration[1)]

- 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.

Data sheet SMD

Characteristics

Temperature range for specification: T = –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	—	315.00	—	MHz
Maximum insertion attenuation	α_{max}				
314.50 ... 315.50 MHz		—	1.4	1.9	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
314.50 ... 315.50 MHz		—	0.4	1.0	dB
Input VSWR					
314.50 ... 315.50 MHz		—	1.3	1.6	
Output VSWR					
314.50 ... 315.50 MHz		—	1.3	1.6	
Attenuation	α				
270.00 ... 286.00 MHz		60	68	—	dB
293.00 ... 293.90 MHz		56	64	—	dB
304.00 ... 304.60 MHz		49	53	—	dB
325.40 ... 326.00 MHz		29	33	—	dB
336.10 ... 337.00 MHz		52	60	—	dB
357.50 ... 358.70 MHz		55	63	—	dB

Data sheet SMD

Characteristics

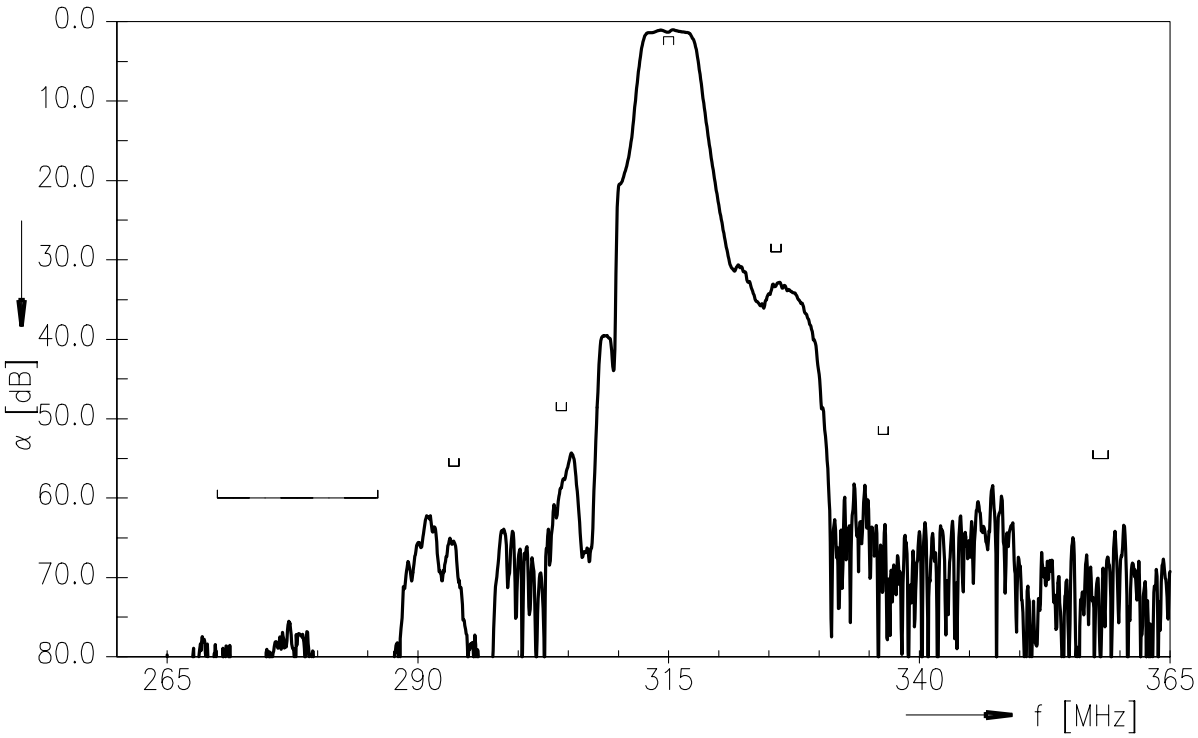
Temperature range for specification: T = –45 ˚C to+105 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	315.00	—	MHz
Maximum insertion attenuation	α_{max}				
314.50 ... 315.50 MHz		—	1.4	2.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
314.50 ... 315.50 MHz		—	0.4	1.0	dB
Input VSWR					
314.50 ... 315.50 MHz		—	1.3	1.6	
Output VSWR					
314.50 ... 315.50 MHz		—	1.3	1.6	
Attenuation	α				
270.00 ... 286.00 MHz		60	68	—	dB
293.00 ... 293.90 MHz		56	64	—	dB
304.00 ... 304.60 MHz		49	53	—	dB
325.40 ... 326.00 MHz		29	33	—	dB
336.10 ... 337.00 MHz		52	60	—	dB
357.50 ... 358.70 MHz		55	63	—	dB

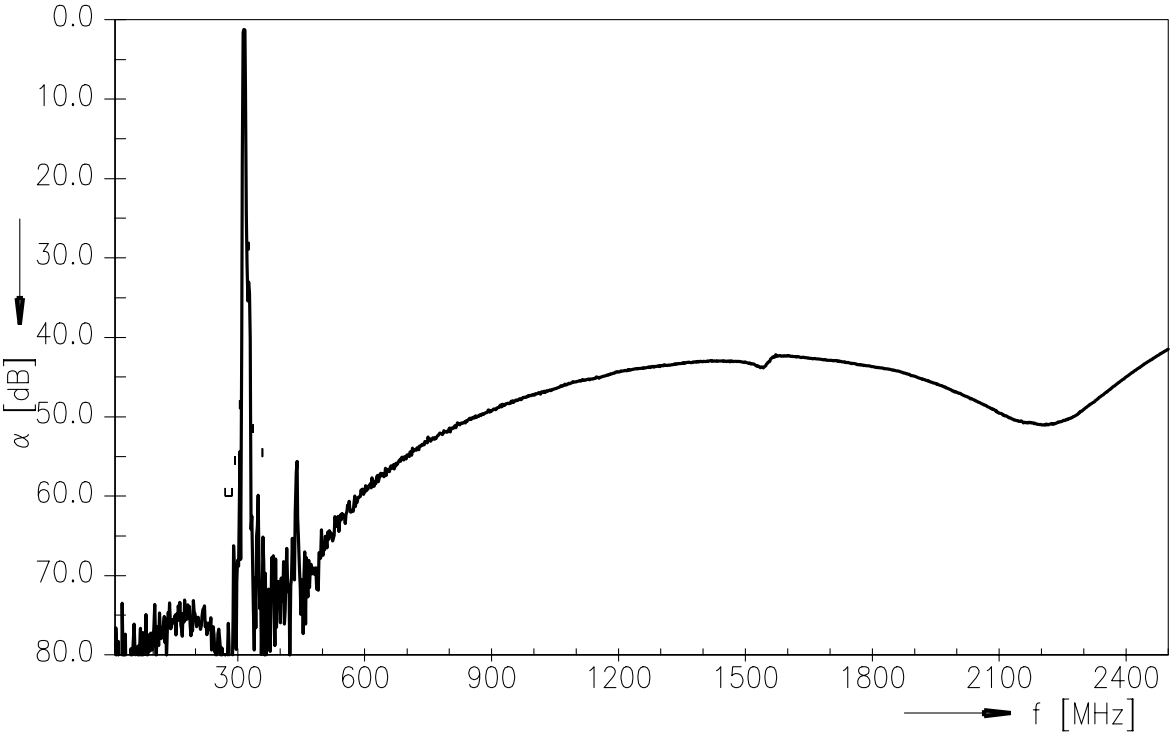
Maximum ratings

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

Transfer function (wideband)



Transfer function (ultimate rejection)



References

Type	B3719
Ordering code	B39321B3719H110
Marking and package	C61157-A7-A143
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3719_NB.s2p, B3719_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."
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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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