



SAW Components

SAW filter

Short range devices

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

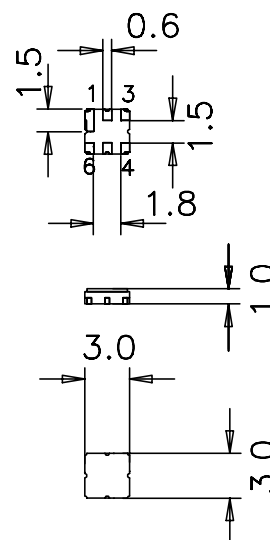
Application

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



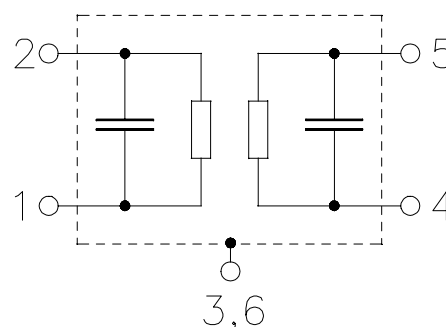
Features

- Package size 3.0 x 3.0 x 1.0 mm³
- Package code DCC6E
- RoHS compatible
- Approximate weight 0.037 g
- Package for **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.

Characteristics

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

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	315.00	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
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

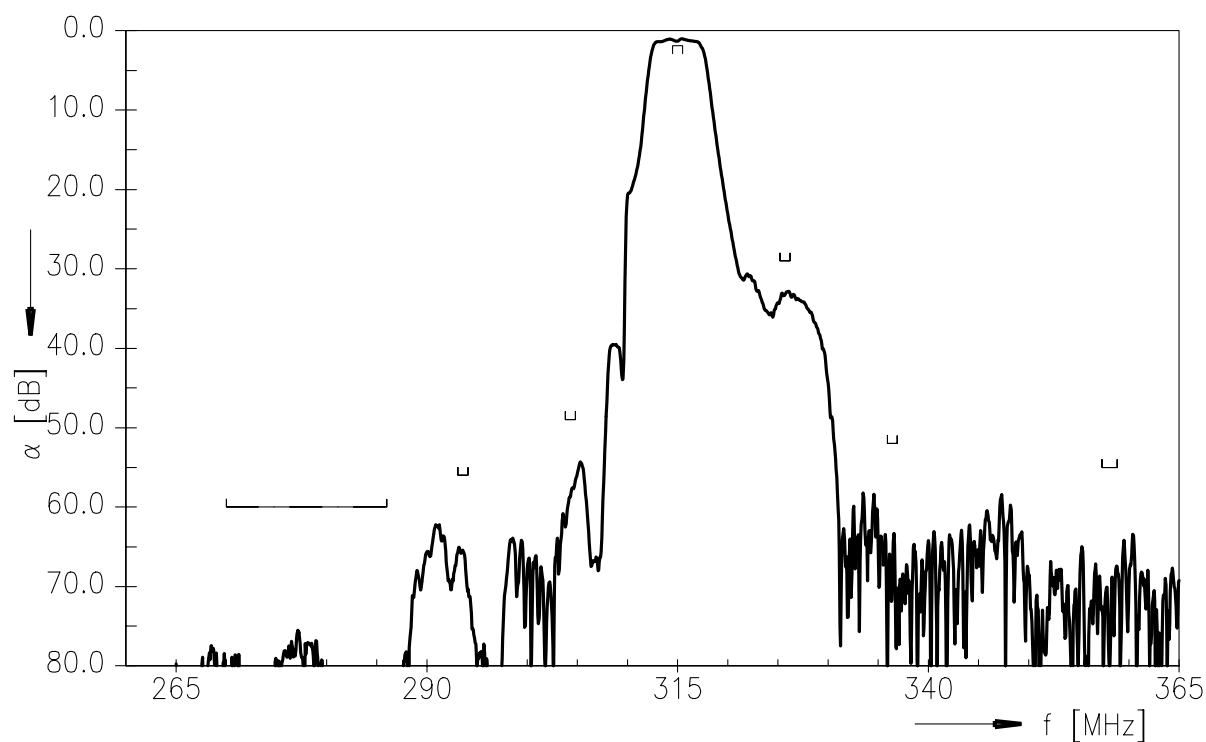
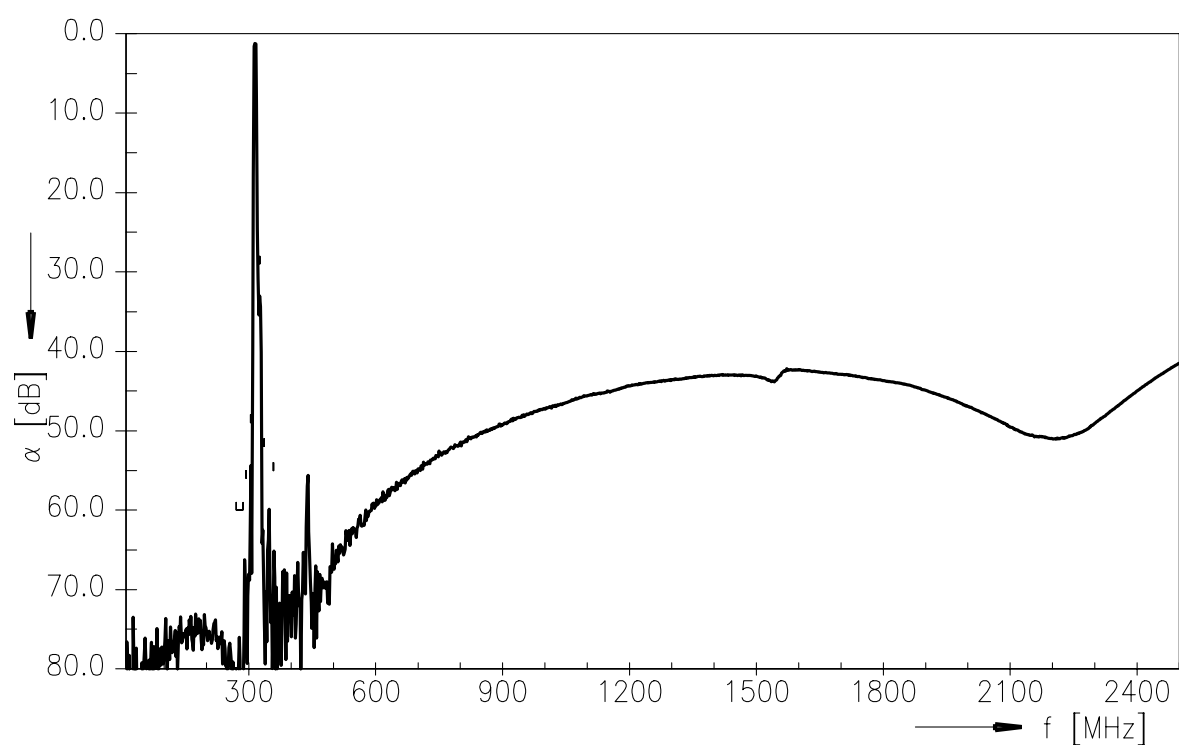
Characteristics

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	—	315.00	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.
Matching coils	See http://www.tdk.co.jp/tefe02/coil.htm#aname1 http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

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

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