



SAW Components

SAW RF filter

Short range devices

Series/type:	B3727
Ordering code:	B39431B3727H110
Date:	March 22, 2010
Version:	2.1

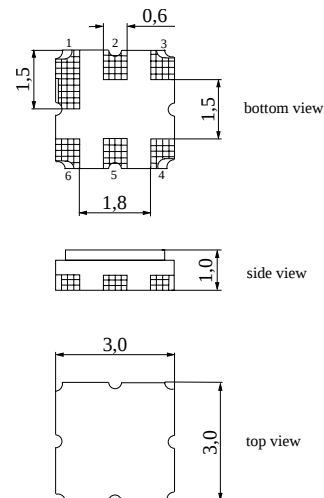
Application

- Low-loss RF filter for remote control receivers
- Balanced and unbalanced operation possible



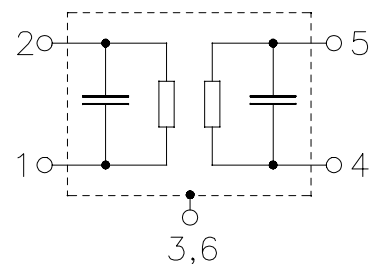
Features

- 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.

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	—	433.92	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
433.22 ... 434.62 MHz		—	2.8	3.7	dB
433.12 ... 434.72 MHz		—	2.8	3.8	dB
433.10 ... 434.70 MHz ¹⁾		—	2.8	3.7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
433.12 ... 434.72 MHz		—	0.4	1.3	dB
433.10 ... 434.70 MHz ¹⁾		—	0.4	1.3	dB
Input VSWR					
433.12 ... 434.72 MHz		—	1.6	2.0	
433.10 ... 434.70 MHz ¹⁾		—	1.6	1.9	
Output VSWR					
433.12 ... 434.72 MHz		—	1.6	2.0	
433.10 ... 434.70 MHz ¹⁾		—	1.6	1.9	
Attenuation	α				
10.00 ... 400.00 MHz		57	62	—	dB
400.00 ... 415.00 MHz		50	57	—	dB
415.00 ... 425.00 MHz		43	48	—	dB
425.00 ... 429.00 MHz		21	27	—	dB
439.00 ... 442.00 MHz		12 ²⁾	22	—	dB
442.00 ... 445.00 MHz		28	32	—	dB
445.00 ... 452.00 MHz		30	35	—	dB
452.00 ... 750.00 MHz		48	52	—	dB
750.00 ... 1900.00 MHz		43	48	—	dB
1900.00 ... 2500.00 MHz		32	37	—	dB

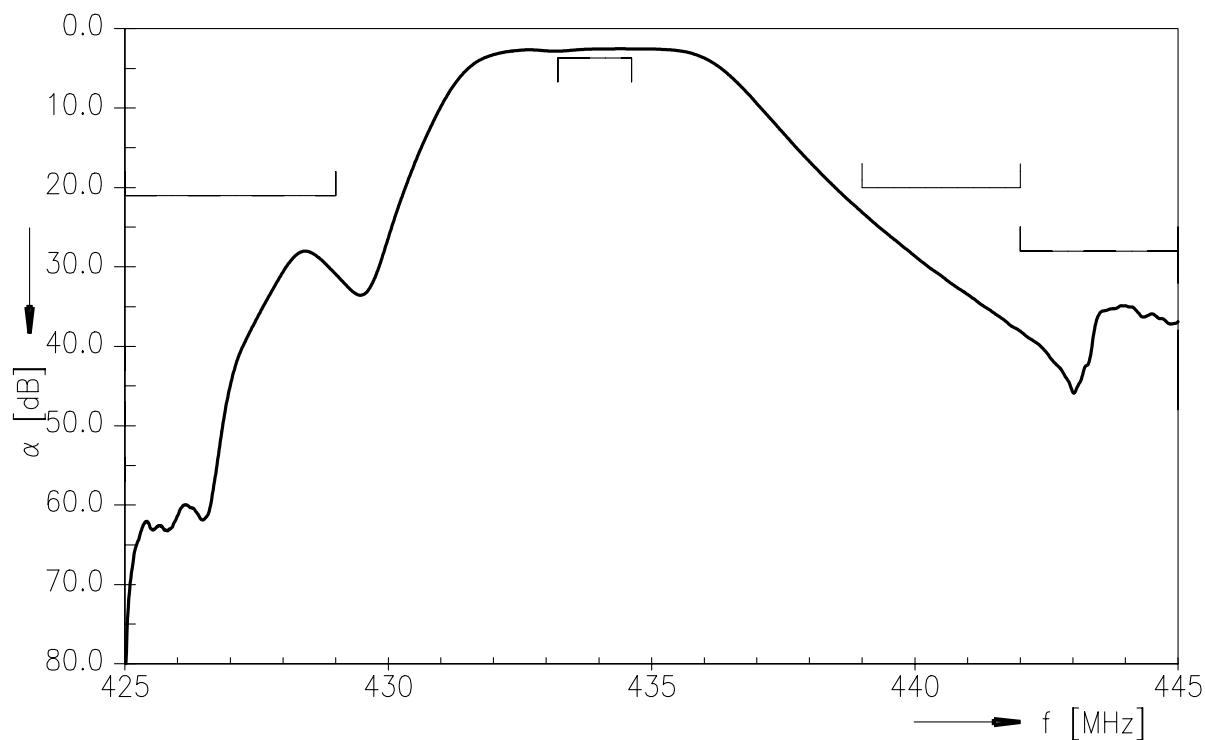
1) Temperature range for specification: $T = -30\text{ °C to }+70\text{ °C}$

2) $T = +25\text{ °C}$: 20 dB

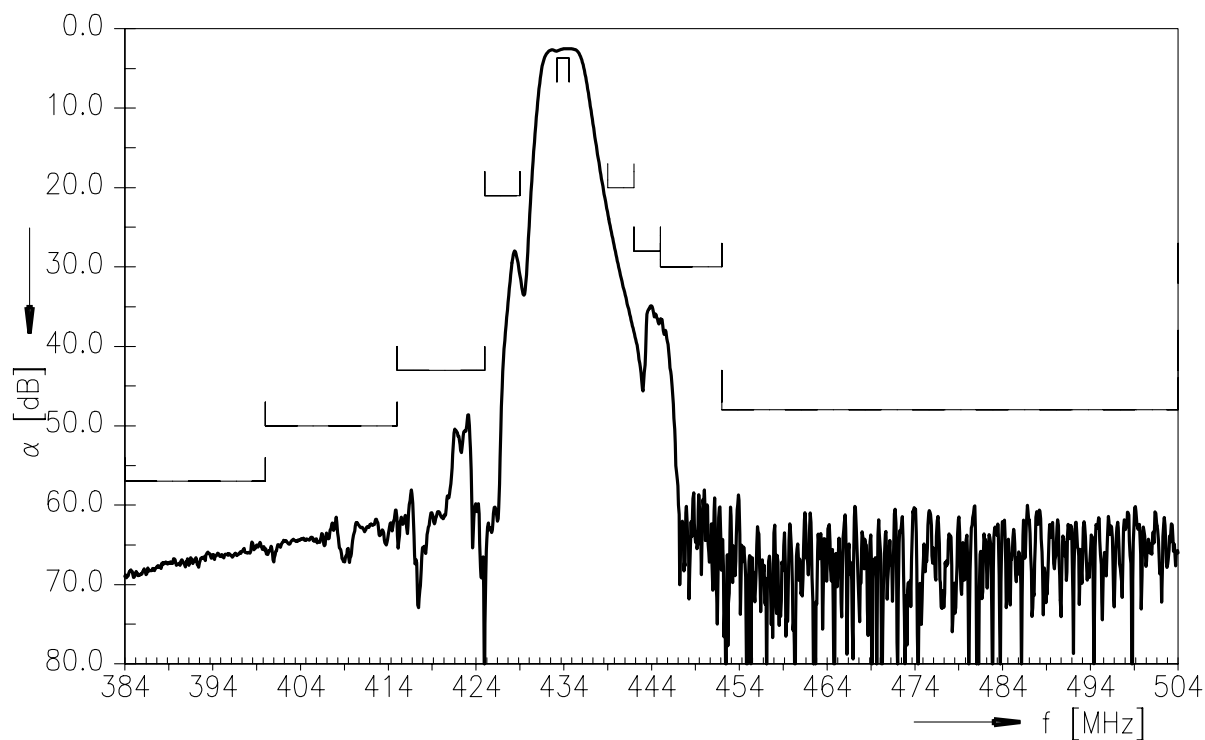
Maximum ratings

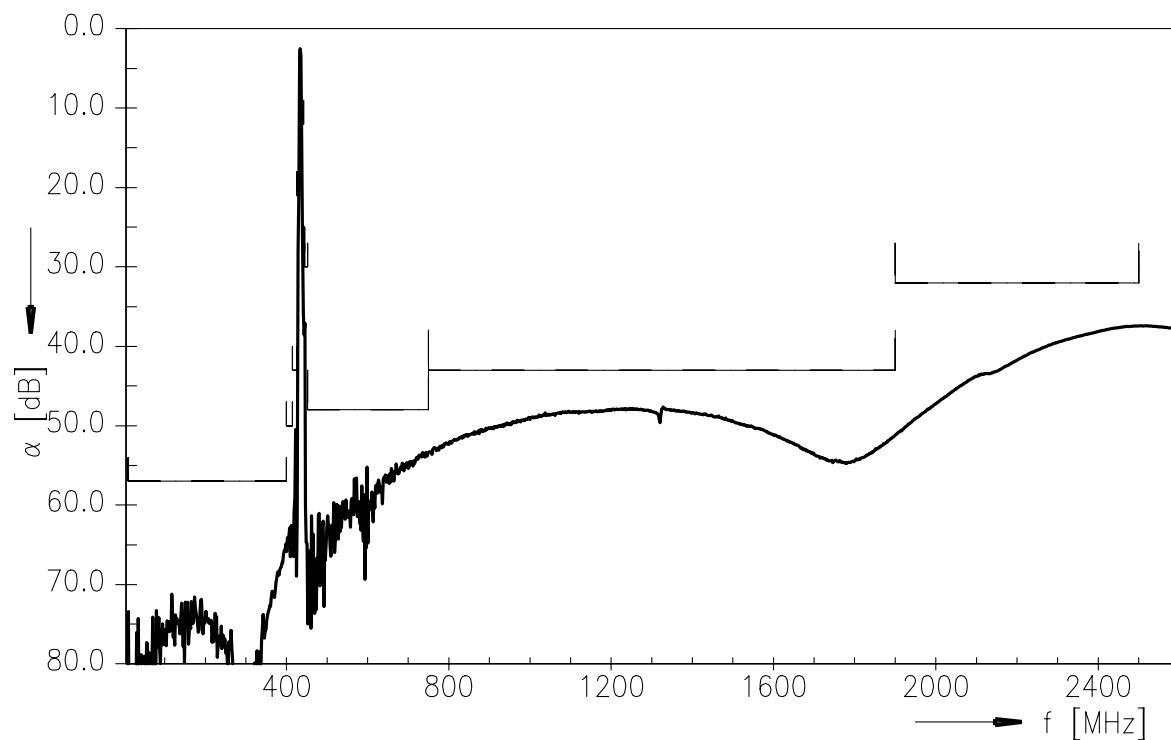
Operable temperature range	T	−45/+125	°C	
Storage temperature range	T _{stg}	−45/+125	°C	
DC voltage	V _{DC}	6	V	
Source power	P _S	13	dBm	source impedance 50 Ω

Transfer function



Transfer function (wideband)



Transfer function (ultimate rejection)


References

Type	B3727
Ordering code	B39431B3727H110
Marking and package	C61157-A7-A143
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3727_NB.s2p B3727_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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