



# SAW Components

Data Sheet B3872





**SAW Components**

**B3872**

**Vestigial Sideband Filter**

**38,90 MHz**

**Preliminary Data Sheet**

**Standard**

- B/G

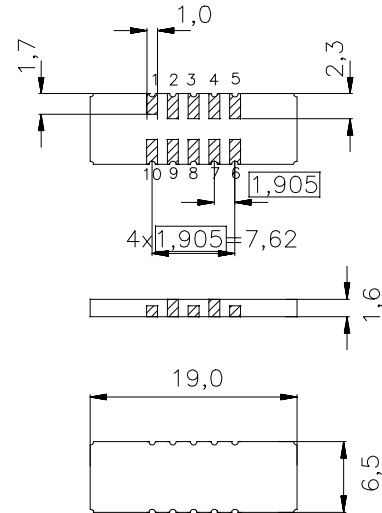
**Features**

- Vestigial sideband filter with sound
- Constant group delay
- Hermetically sealed ceramic package

**Terminals**

- Gold plated

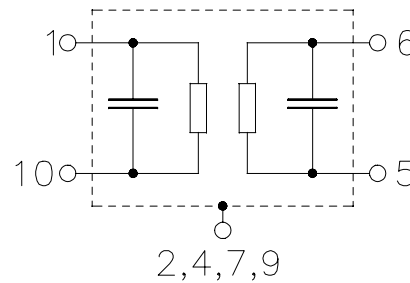
**Ceramic package DCC18**



Dimensions in mm, approx. weight 0,8 g

**Pin configuration**

- 1 Input
- 10 Input – ground
- 6 Output
- 5 Output – ground
- 2, 4, 7, 9 Case – ground
- 3, 8 Must be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3872	B39390-B3872-U210	C61157-A7-A054	F61074-V8166-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 20/+ 85	°C	
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	15	dBm	source impedance 50 $\Omega$



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**Characteristics**

Operating temperature:  $T = 25\text{ }^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$   
 Group delay aperture: 80 kHz

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Nominal frequency</b>	$f_N$	—	38,90	—	MHz
<b>Insertion attenuation at <math>f_N</math></b>	$\alpha_N$	33,4	34,5	36,4	dB
<b>Relative attenuation (relative to <math>\alpha_N</math>)</b>	$\alpha_{rel}$				
	31,90 MHz	34,0	48,0	—	dB
	33,15 MHz	-0,9	0,1	1,1	dB
	33,40 MHz	-0,8	0,0	1,2	dB
	39,65 MHz	2,3	3,3	4,3	dB
	40,15 MHz	22,0	25,0	—	dB
	40,40 MHz	34,0	40,0	—	dB
	44,40 MHz	38,0	55,0	—	dB
	25,00 ... 31,90 MHz	32,0	40,0	—	dB
	40,40 ... 45,00 MHz	30,0	37,0	—	dB
<b>Reflected wave signal suppression</b>					
	1,50 $\mu\text{s}$ ... 6,00 $\mu\text{s}$ after main pulse	37,0	45,0	—	dB
	1,60 $\mu\text{s}$ ... 1,50 $\mu\text{s}$ before main pulse	50,0	65,0	—	dB
<b>Group delay at <math>f_N</math></b>	$\tau_N$	—	1,6	—	$\mu\text{s}$
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
	33,40 ... 39,65 MHz	—	90	150	ns
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-87	—	ppm/K



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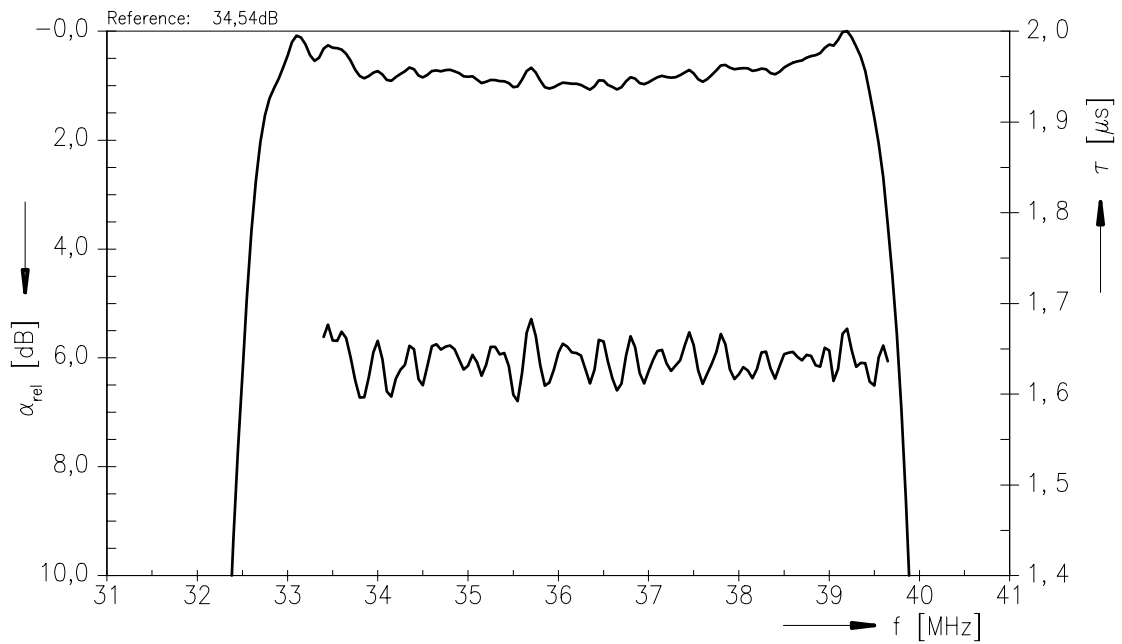
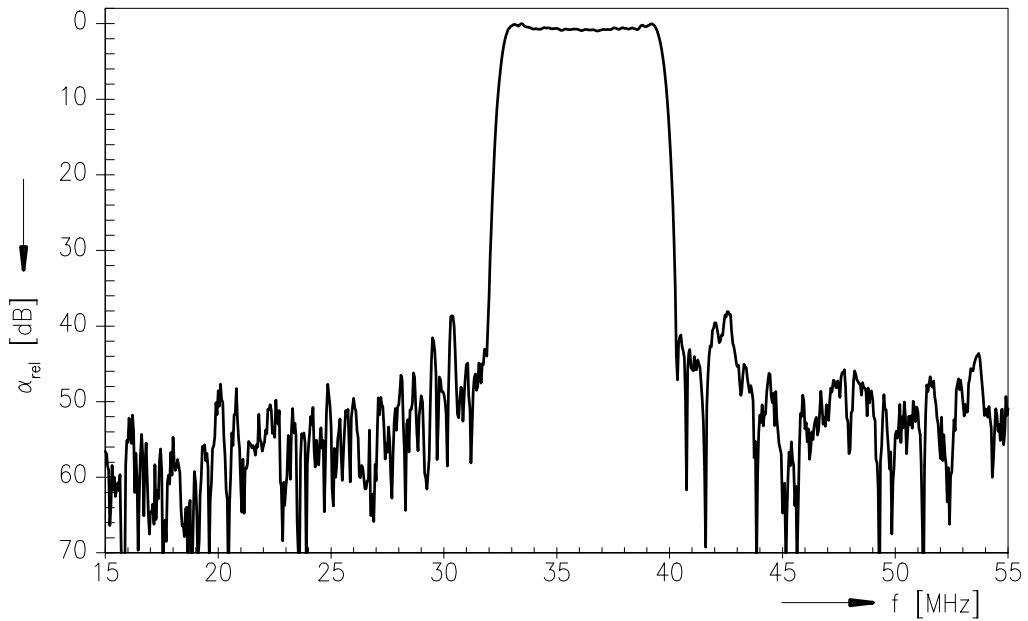
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Frequency response





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