

# **SAW Components**

Data Sheet B4067





SAW Components	B4067
Low-Loss Filter	810,0 MHz

**Data Sheet** 

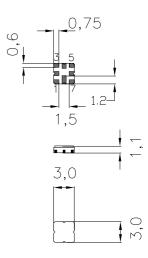
## SMD ceramic package QCC8D

#### **Features**

- Low loss IF filter for HiperLAN
- Balanced to balanced operation
- Package for Surface Mounted Technology (SMT)

#### **Terminals**

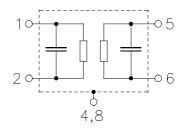
Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

## Pin configuration

- 2 Input
- 5 Output
- 6 Output
- 3, 7 To be grounded
- 4, 8 Case ground



Туре	Ordering code	Marking and Package	Packing
		according to	according to
B4067	B39811-B4067-U810	C61157-A7-A72	F61074-V8101-Z000

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

Operable temperature range	T	- 40/ <del>+</del> 85	°C	
Storage temperature range	$T_{ m stg}$	<b>- 40/+ 85</b>	°C	
DC voltage	$V_{\rm DC}$	0	V	
Source power	$P_{s}$	0	dBm	source impedance 200 Ω



SAW Components B4067

Low-Loss Filter 810,0 MHz

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#### **Characteristics**

Operating temperature range:  $T_A = 0 \dots +70 \,^{\circ} \text{C}$ Terminating source impedance:  $Z_S = 200 \,\Omega$ Terminating load impedance:  $Z_L = 200 \,\Omega$ 

			min.	typ.	max.	
Nominal frequency		$f_{N}$	_	810,0	_	MHz
Minimum insertion attenuation		$\alpha_{\text{min}}$	_	1,7	4,0	dB
Amplitude ripple in passband (p-p)		Δα				
	$f_{\rm N}$ ± 8,0 MHz		_	0,6	1,0	dB
	$f_{\rm N} \pm 8,5~{\rm MHz}$		_	0,7	1,2	dB
Group delay ripple (p-p)		$\Delta  au$				
	$f_{\rm N}$ ± 8,5 MHz			25	75	ns
Relative attenuation (relative to $\alpha_{min}$ )		$\alpha_{rel}$				
	<i>f</i> <sub>N</sub> – 20,0 MHz		15,5	36	_	dB
	$f_{\rm N}$ + 20,0 MHz		15,5	24	_	dB
	<i>f</i> <sub>N</sub> – 40,0 MHz		23	54	_	dB
	$f_{\rm N} + 40,0 \; {\rm MHz}$		23	48	_	dB
$f_{N}$ – 500 MHz $f_{N}$ – 50,0 MHz			45	54	_	dB
$f_{\rm N} + 50,0  \rm MHz \dots$	$f_{N} + 500  MHz$		45	58	_	dB
Reflected wave signal suppres	sion					
	after main pulse	:	46,0	48,0	_	dB



SAW Components B4067

Low-Loss Filter 810,0 MHz

**Data Sheet** 

## **Characteristics (2 filters cascaded)**

Operating temperature range:  $T_{\rm A}=0...+70\,^{\circ}{\rm C}$  Terminating source impedance:  $Z_{\rm S}=200\,\Omega$  Terminating load impedance:  $Z_{\rm L}=200\,\Omega$ 

		min.	typ.	max.	
Nominal frequency	$f_{N}$	_	810,0	_	MHz
Minimum insertion attenuation		_	3,4	8,0	dB
Amplitude ripple in passband (p-p)					
$f_{\rm N}$ ± 8,0 MHz			1,2	2,0	dB
$f_{N} \pm 8,5 \; MHz$		_	1,8	2,4	dB
Group delay ripple (p-p)	$\Delta  au$				
$f_{N} \pm 8,5 \; MHz$		_	50	150	ns
Relative attenuation (relative to $\alpha_{min}$ )					
$f_{\rm N} - 20,0  {\rm MHz}$		31	60	_	dB
$f_{\rm N} + 20,0  {\rm MHz}$		31	48	_	dB
$f_{N} - 40,0 \text{ MHz}$		46	108 *)	_	dB
$f_{N} + 40,0 \text{ MHz}$		46	96 *)	_	dB
$f_{N} - 500 \text{MHz} \dots f_{N} - 50,0 \text{MHz}$		90	108 *)	_	dB
$f_{\rm N}$ + 50,0 MHz $f_{\rm N}$ + 500 MHz		90	116 *)		dB
Reflected wave signal suppression					
900 ns after main pulse	9	46,0	48,0		dB

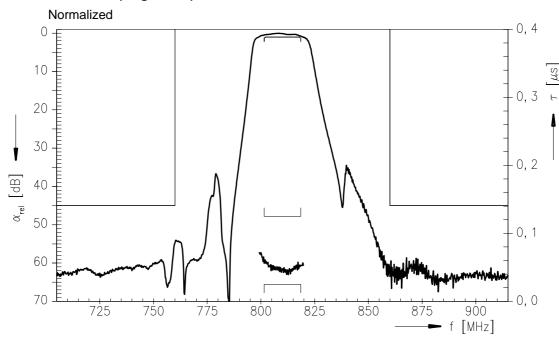
<sup>\*)</sup> value depends on pcb layout



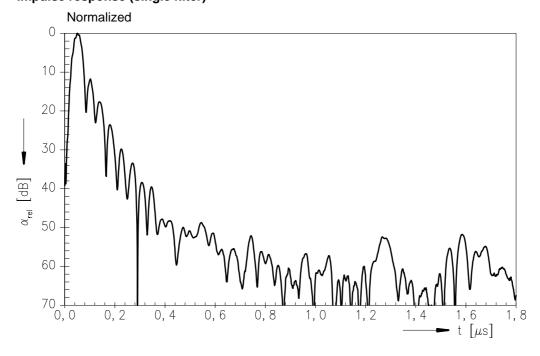
SAW Components B4067
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# Transfer function (single filter)



# Impulse response (single filter)

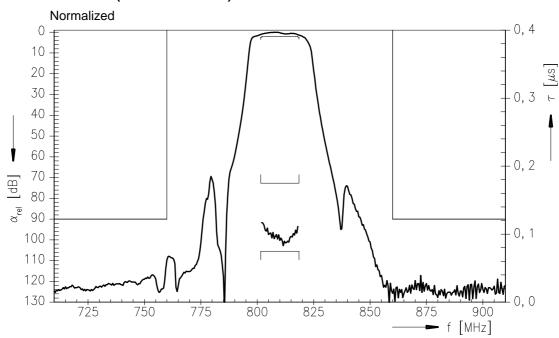




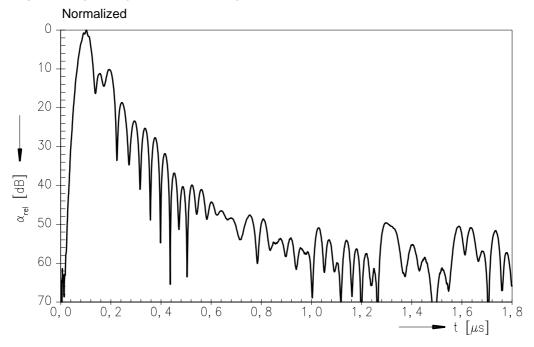
SAW Components B4067
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## **Transfer function (2 cascaded filters)**



# Impulse response (2 cascaded filters)





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