

# SAW Components

Data Sheet B3646





SAW Components	B3646
Low-Loss Filter	208,0 MHz
Data Sheet	

# Ceramic package QCC10B

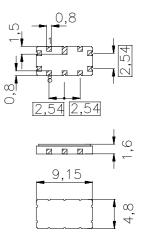


- Low-loss wideband IF filter
- No matching required for operation at 50 Ω Package for Surface Mounted Technology (SMT)

## Terminals

Features

Gold-plated



05

04

# Dimensions in mm, approx. weight 0,2 g

0 1,3,6,8

100

90

# **Pin configuration**

10	Input
9	Input ground
5	Output
4	Output ground
2, 7	Ground
1, 3, 6, 8	Case – ground

Туре	Ordering code	Marking and Package according to	Packing according to
B3646	B39211-B3646-Z710	C61157-A7-A49	F61074-V8172-Z000

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

Operable temperature range	Т	- 25/+ 85	°C
Storage temperature range	T <sub>stg</sub>	- 40/+ 125	°C
DC voltage	V <sub>DC</sub>	0	V
Source power	Ps	10	dBm

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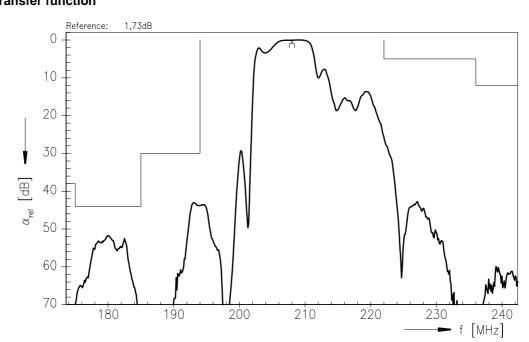
SAW Components			E	33646
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Characteristics				
Operating temperature: Terminating source impedance: Terminating load impedance:	$T_{A} = -10 \dots +85 \degree C$ $Z_{S} = 50 \Omega$ $Z_{L} = 50 \Omega$			
	min.	typ.	max.	

Nominal frequency		f <sub>N</sub>	_	208,0	_	MHz
Maximum insertion attenua	tion f <sub>N</sub> 400 kHz	$lpha_{max}$	1,5	2,0	3,5	dB
Passband width	$\alpha_{rel} \le 1,0 \text{ dB}$	B <sub>1,0dB</sub>	_	5,08	_	MHz
Amplitude ripple (p-p)	<i>f</i> <sub>N</sub> ± 100 kHz	Δα	_	0,03	0,2	dB
Amplitude ripple (p-p)	<i>f</i> <sub>N</sub> ± 400 kHz	Δα	_	0,1	1,0	dB
Absolute group delay (at $f_N$ )		τ	_	120	300	ns
Group delay ripple (p-p)	$f_{\sf N} \pm 400 \; {\sf kHz}$	Δτ	_	8	30	ns
<b>Relative attenuation</b> (relative 10,0 MHz $f_N$ - 33,0 $f_N$ - 33,0 MHz $f_N$ - 2 $f_N$ - 23,0 MHz $f_N$ - 1 $f_N$ - 14,0 MHz $f_N$ - 0 $f_N$ + 0,4 MHz $f_N$ + 1 $f_N$ + 14,0 MHz $f_N$ + 1 $f_N$ + 28,0 MHz 450,0	MHz 23,0 MHz 14,0 MHz 0,4 MHz 4,0 MHz 28,0 MHz	α <sub>rel</sub>	38,0 44,0 30,0 0,0 0,0 5,0 12,0	50,0 50,0 40,0 2,0 2,0 35,0 45,0		dB dB dB dB dB dB dB dB
Input IP3 (Third order interce	pt point) <sup>1)</sup>		45,0	_	—	dBm
VSWR	$f_{\rm N} \pm 400 \text{ kHz}$		_	1,5:1	2,0:1	
Temperature coefficient of f	frequency	TC <sub>f</sub>		-70		ppm/K

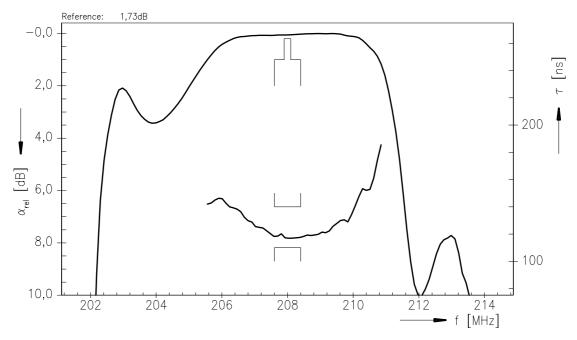
 With two 10 dbm fundamental signals at 180 MHz and 208 MHz applied the third order intermodulation product at the output at 236 MHz will have less than -64 dBm.







# Transfer function (pass band)



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