

# SAW Components

Data Sheet B3849





SAW Components	B3849
Low-Loss Filter	357,1 MHz

**Data Sheet** 

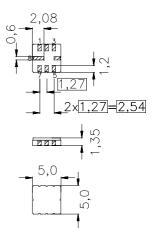
## Ceramic package QCC8C

#### **Features**

- Low-loss IF filter for UMTS base stations
- 20 MHz usable bandwidth
- Constant group delay
- Ceramic SMD package

#### **Terminals**

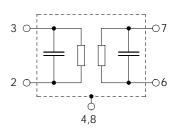
■ Gold plated



Dimensions in mm, approx. weight 0,1 g

## Pin configuration

3	Input
2	Input ground
7	Output
6	Output ground
4, 8	Case ground
1, 5	To be grounded



Туре	Ordering code	Marking and Package	Packing		
		according to	according to		
B3849	B39361-B3849-U310	C61157-A7-A56	F61074-V8169-Z000		

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

Operable temperature range	T	-40 / +85	°C
Storage temperature range	$T_{\rm stg}$	-40 / +85	°C
DC voltage	$V_{\rm DC}$	0	V
Source power	$P_{s}$	10	dBm



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## Characteristics

Operating temperature range: T = -35 ... 85 °C

 $Z_{\rm S} = 50~\Omega$  and matching network  $Z_{\rm S} = 50~\Omega$  and matching network 200 kHz Terminating source impedance: Terminating source impedance:

Group delay aperture:

		min.	typ.	max.	
Nominal frequency	$f_{N}$	_	357,1	_	MHz
Minimum insertion attenuation	$\alpha_{\text{min}}$	_	9,7	11,0	dB
<b>Amplitude ripple</b> (p-p) 347,1 367,1 MHz	Δα	_	0,6	1,0	dB
Pass bandwidth $\alpha_{rel} \ \leq 1,0 \ dB$	B <sub>1,0dB</sub>	_	32	_	MHz
Relative attenuation (relative to $\alpha_{min}$ )		35 35	50 42	_ _	dB dB
Group delay ripple (p-p) 347,1 367,1 MHz	Δτ	_	25	70	ns
Absolute group delay	τ	_	0,5	0,6	μs
<b>1 dB compression</b> 347,1 367,1 MHz	:	12	_	_	dBm
Input IP3 347,1 367,1 MHz		32	_	_	dBm
Temperature coefficient of frequency	TC <sub>f</sub>	_	- 87	_	ppm/K



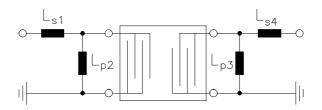
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Matching network (element values may depend on pcb layout)

## 50 $\Omega$ unbalanced:



 $L_{s1} = 47 \text{ nH}$ 

 $L_{p2} = 47 \text{ nH}$ 

 $L_{p3} = 39 \text{ nH}$ 

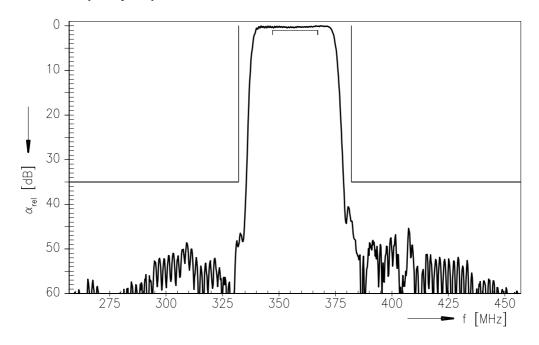
 $L_{s4} = 39 \text{ nH}$ 



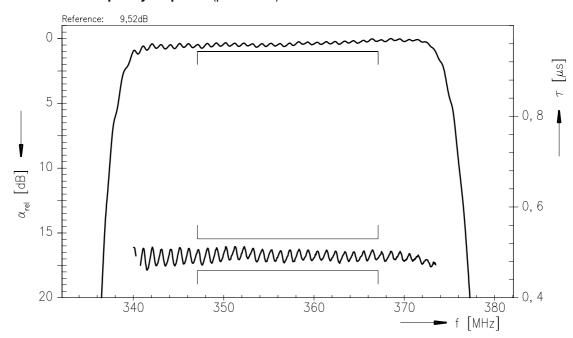
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# Normalized frequency response



## Normalized frequency response (pass band)





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