EPCOS

SAW Components

Data Sheet B3849

Data Sheet

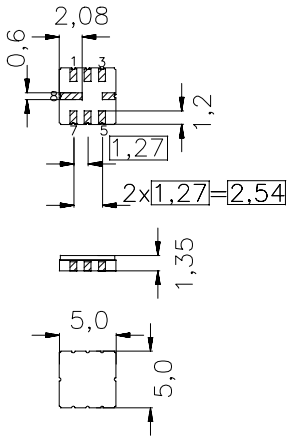
Ceramic package **QCC8C**

Features

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

Terminals

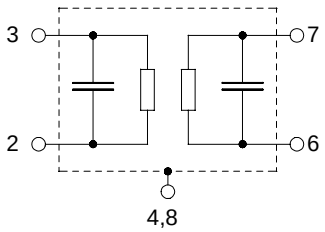
- Gold plated



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



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

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	–40 / +85	˚C	
Storage temperature range	T_{stg}	–40 / +85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_S	10	dBm	

Characteristics

Operating temperature range: T = -35 .. 85 °C
Terminating source impedance: Z_S = 50 Ω and matching network
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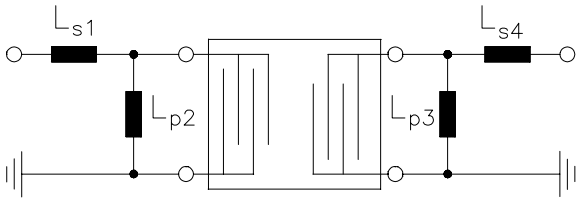
Group delay aperture: 200 kHz

		min.	typ.	max.	
Nominal frequency	f_N	—	357,1	—	MHz
Minimum insertion attenuation	α_{min}	—	9,7	11,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
347,1 ... 367,1 MHz		—	0,6	1,0	dB
Pass bandwidth					
α_{rel} ≤ 1,0 dB	$B_{1,0dB}$	—	32	—	MHz
Relative attenuation (relative to α_{min})	α_{rel}				
1,0 ... 332,1 MHz		35	50	—	dB
382,1 ...1000,0 MHz		35	42	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
347,1 ... 367,1 MHz		—	25	70	ns
Absolute group delay	τ	—	0,5	0,6	µs
1 dB compression					
347,1 ... 367,1 MHz		12	—	—	dBm
Input IP3					
347,1 ... 367,1 MHz		32	—	—	dBm
Temperature coefficient of frequency	TC_f	—	– 87	—	ppm/K

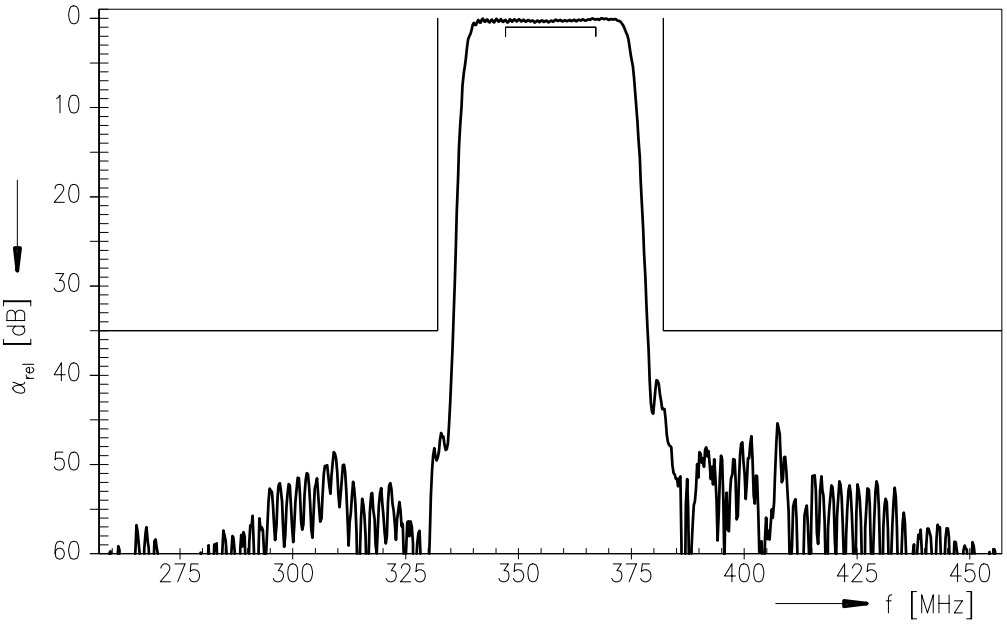
Matching network (element values may depend on pcb layout)

50 Ω unbalanced:

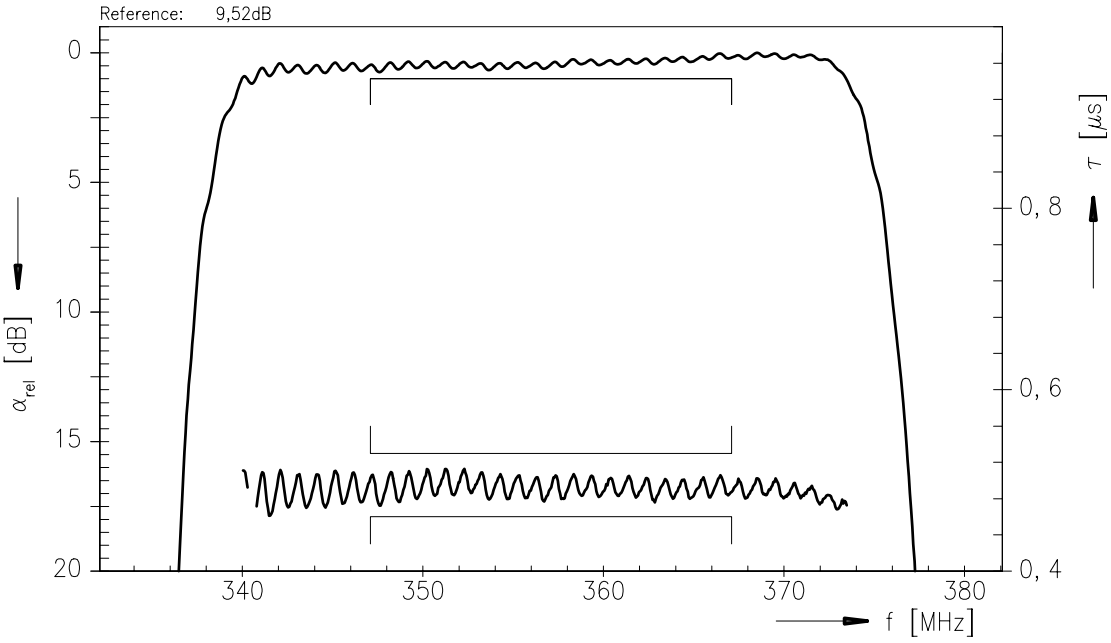


L_{s1} = 47 nH
L_{p2} = 47 nH
L_{p3} = 39 nH
L_{s4} = 39 nH

Normalized frequency response



Normalized frequency response (pass band)



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