

SAW Components

Data Sheet B3849





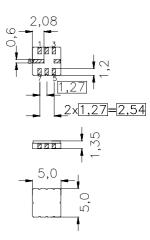
SAW Components	B3849
Low-Loss Filter	357,1 MHz

Features

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

Terminals

Gold plated



Ceramic package QCC8C

Dimensions in mm, approx. weight 0,1 g

Pin configuration

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

3 0	
2 0	
L	4,8

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

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	Т	-40 / +85	°C
Storage temperature range	T _{stq}	-40 / +85	°C
DC voltage	V _{DC}	0	V
Source power	Ps	10	dBm

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Characteristics

Operating temperature range: Terminating source impedance: Terminating source impedance: Group delay aperture:

T = -35 .. 85 °C $Z_{\rm S}$ = 50 Ω and matching network $Z_{\rm S}$ = 50 Ω and matching network 200 kHz

		min.	typ.	max.	
Nominal frequency	f _N		357,1		MHz
Minimum insertion attenuation	$lpha_{min}$	—	9,7	11,0	dB
Amplitude ripple (p-p) 347,1 367,1 MHz	Δα	_	0,6	1,0	dB
Pass bandwidth $\label{eq:areal} \alpha_{\text{rel}} \ \leq 1,0 \ \text{dB}$	B _{1,0dB}	—	32	_	MHz
Relative attenuation (relative to α _{min}) 1,0 332,1 MHz 382,1 1000,0 MHz		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
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

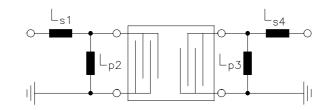




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Matching network (element values may depend on pcb layout)

50 Ω unbalanced:



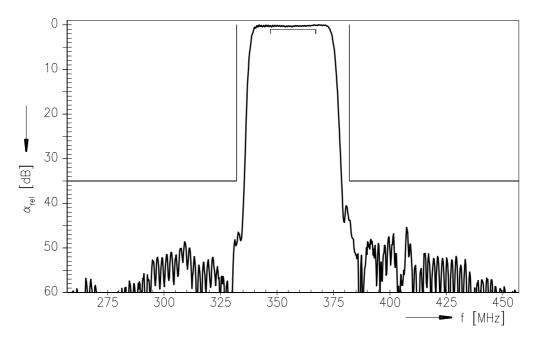
 $L_{s1} = 47 \text{ nH}$ $L_{p2} = 47 \text{ nH}$ $L_{p3} = 39 \text{ nH}$ $L_{s4} = 39 \text{ nH}$

4

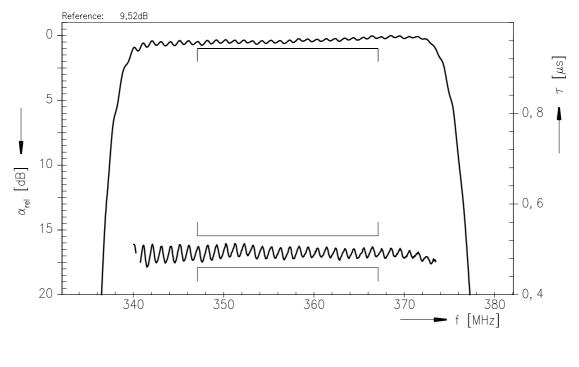


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Normalized frequency response



Normalized frequency response (pass band)



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Jul 30, 2002



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Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC IS P.O. Box 80 17 09, 81617 Munich, GERMANY

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