



Tx IF Filters for Cellular Phones

Series/Type: **B4953**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39381B4953U810		2004-05-19	2004-09-30	2004-12-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



Withdrawn Products

The following products presented in this data sheet are being withdrawn:

B39381B4953U810

Date of withdrawal: 19-MAY-04

Deadline for last orders: 30-SEP-04

Last shipments: 31-DEC-04

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of the sales offices are given on the Internet at www.epcos.com/sales.



SAW Components

Data Sheet B4953

Data Sheet

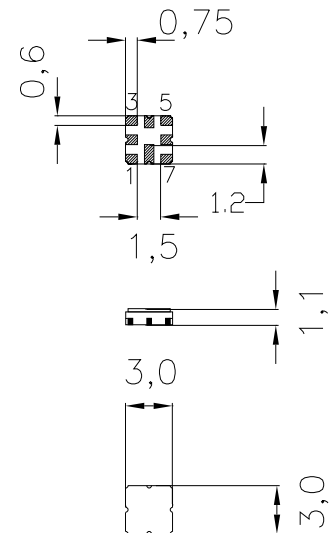



Features

- Low-loss IF filter for mobile telephone, transmit path
- Balanced to balanced operation
- No matching network necessary for operation with 200 Ω input and output impedance
- Ceramic Package for **Surface Mounted Technology (SMT)**

Terminals

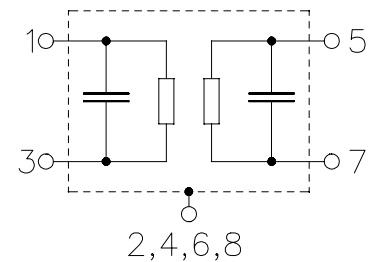
- Gold-plated Ni

Ceramic package QCC8D


Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4953	B39381-B4953-U810	C61157-A7-A72	F61074-V8101-Z000

Electrostatic Sensitive Device (ESD)
Maximum ratings

Operable temperature range	T	- 20 / + 75	$^{\circ}\text{C}$
Storage temperature range	T_{stg}	- 30 / + 85	$^{\circ}\text{C}$
DC voltage	V_{DC}	0	V
Input power max.	P_{IN}	0	dBm


Characteristics

Operating temperature range: $T = 25^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 200\ \Omega$
 Terminating load impedance: $Z_L = 200\ \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	380,0	—	MHz
Maximum insertion attenuation	α_{\max}				
	378,08 ... 381,92 MHz	—	1,8	2,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	378,08 ... 381,92 MHz	—	0,4	0,7	dB
Root mean square of phase delay variation	rms				
	378,08 ... 381,92 MHz	—	1,0	1,5	degree
Attenuation	α				
	50,00 ... 330,00 MHz	50	58	—	dB
	330,00 ... 360,00 MHz	40	45	—	dB
	360,00 ... 370,00 MHz	30	35	—	dB
	390,00 ... 400,00 MHz	14	17	—	dB
	400,00 ... 405,00 MHz	30	33	—	dB
	405,00 ... 420,00 MHz	33	36	—	dB
	420,00 ... 800,00 MHz	40	47	—	dB
Input and output return loss					
	378,08 ... 381,92 MHz	10	12	—	dB

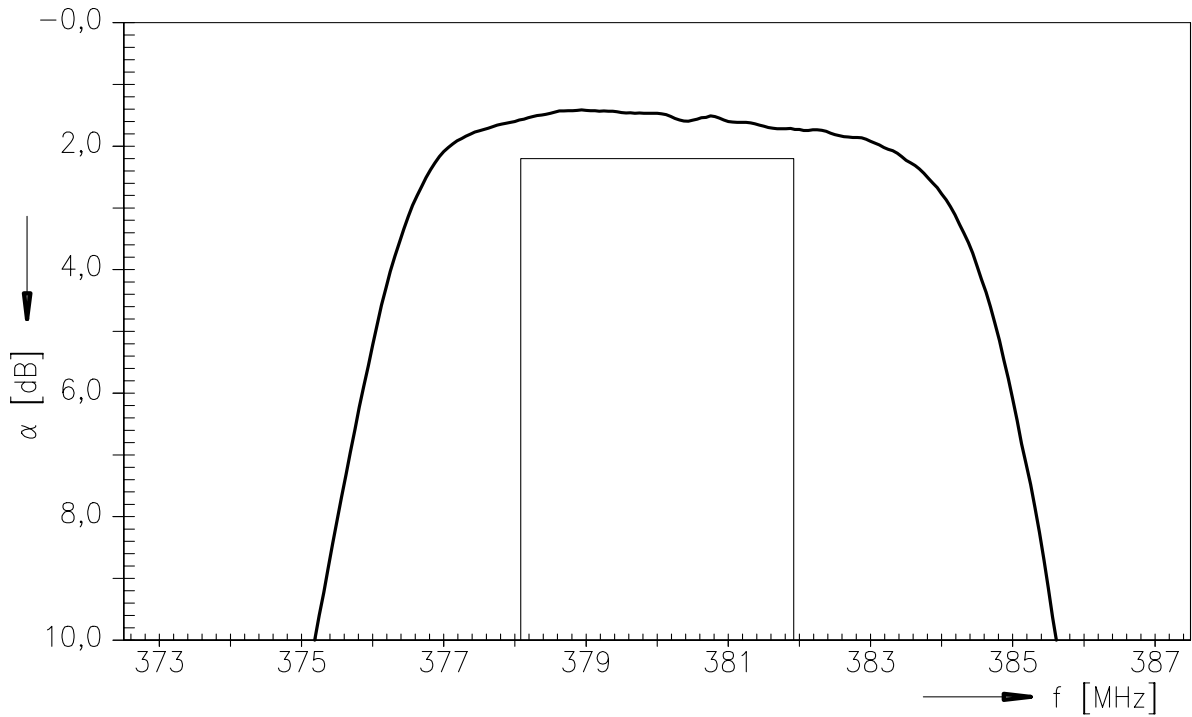

Characteristics

Operating temperature range: $T = -20$ to $+75^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 200\ \Omega$
 Terminating load impedance: $Z_L = 200\ \Omega$

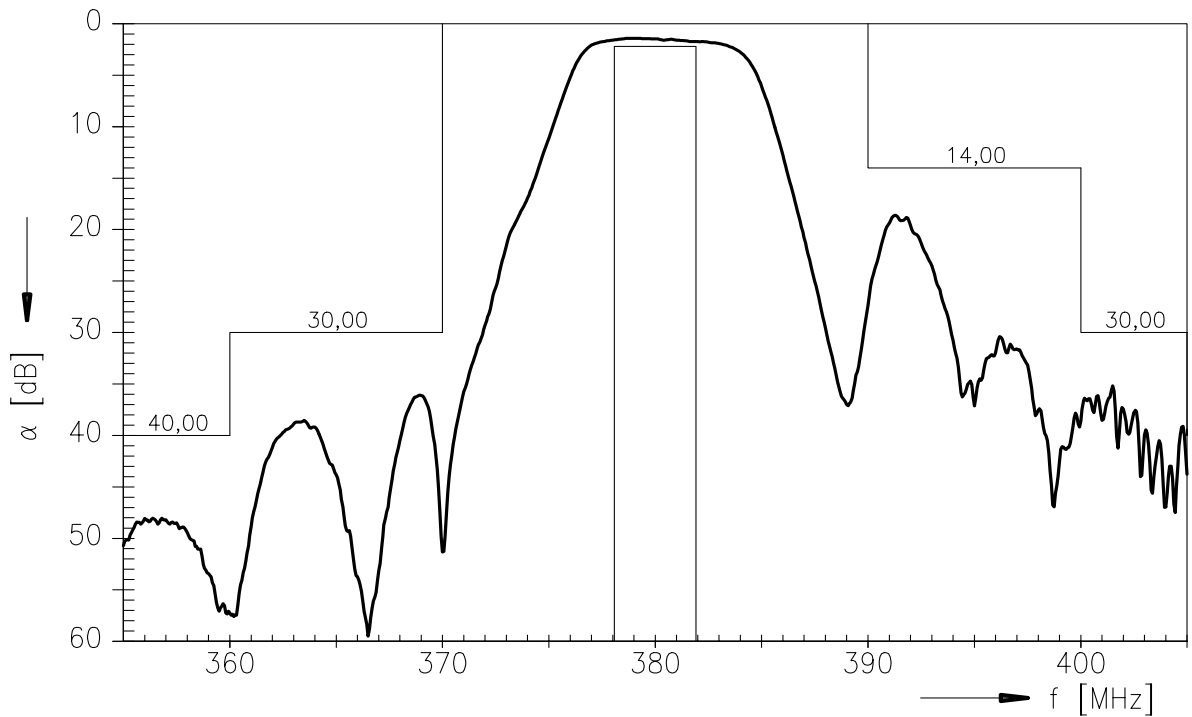
		min.	typ.	max.	
Center frequency	f_c	—	380,0	—	MHz
Maximum insertion attenuation	α_{\max}				
	378,08 ... 381,92 MHz	—	1,9	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	378,08 ... 381,92 MHz	—	0,5	0,9	dB
Root mean square of phase delay variation	rms				
	378,08 ... 381,92 MHz	—	2,0	2,5	degree
Attenuation	α				
	50,00 ... 330,00 MHz	50	58	—	dB
	330,00 ... 360,00 MHz	40	45	—	dB
	360,00 ... 370,00 MHz	30	35	—	dB
	390,00 ... 400,00 MHz	14	17	—	dB
	400,00 ... 405,00 MHz	30	33	—	dB
	405,00 ... 420,00 MHz	33	36	—	dB
	420,00 ... 800,00 MHz	40	47	—	dB
Input and output return loss					
	378,08 ... 381,92 MHz	10	12	—	dB



Transfer function (pass band)

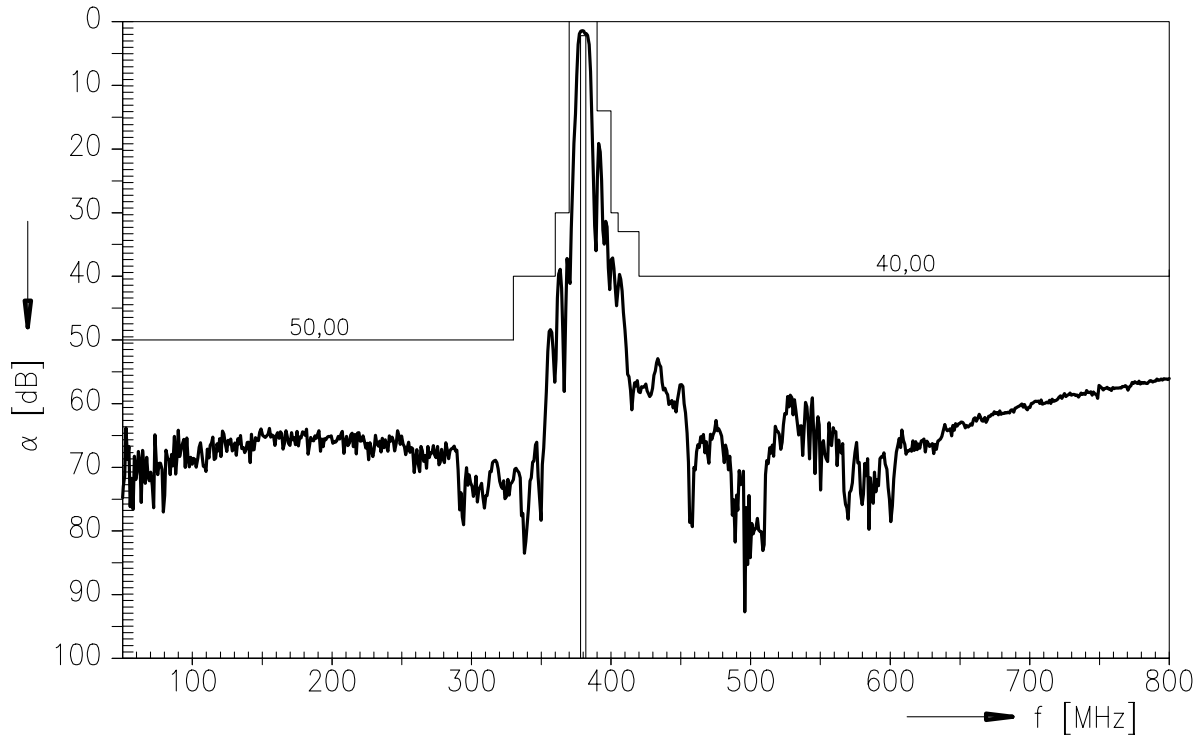


Transfer function (narrow band)





Transfer function (wide band)





SAW Components

B4953

Low-Loss Filter for Mobile Communication

380,00 MHz

Data Sheet



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**Surface Acoustic Wave Components Division, SAW MC WT
P.O. Box 80 17 09, 81617 Munich, GERMANY**

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This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.