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The following products presented in this data sheet are being withdrawn.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

EPCOS

Withdrawn Products

The following products presented in this data sheet are being withdrawn: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

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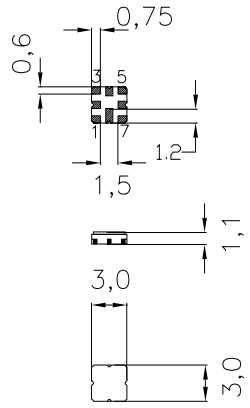
SAW Components

Data Sheet B4953

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 **S**urface **M**ounted **T**echnology (**SMT**)

Ceramic package **QCC8D**



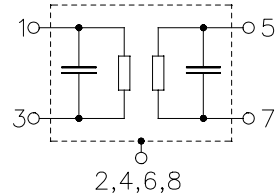
Dimensions in mm, approx. weight 0,037 g

Terminals

- Gold-plated Ni

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

Maximum ratings

Operable temperature range	T	– 20 / + 75	˚C
Storage temperature range	T_{stg}	– 30 / + 85	˚C
DC voltage	V_{DC}	0	V
Input power max.	P_{IN}	0	dBm

Characteristics

Operating temperature range: T = 25°C
Terminating source impedance: Z_S = 200 Ω
Terminating load impedance: Z_L = 200 Ω

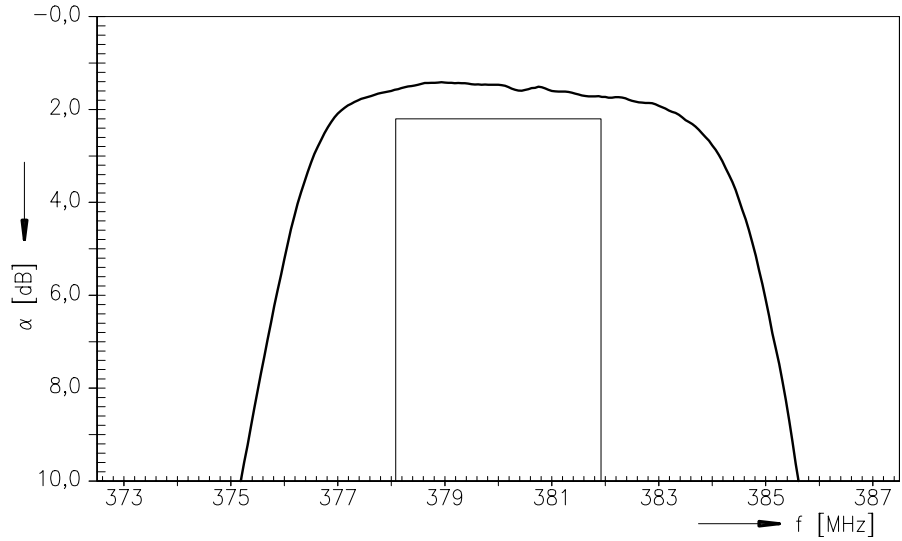
		min.	typ.	max.	
Center frequency	f_c	—	380,0	—	MHz
Maximum insertion attenuation	α_{max}				
378,08 ... 381,92 MHz		—	1,8	2,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
378,08 ... 381,92 MHz		—	0,4	0,7	dB
Root mean square of phase delay variation	rms				
378,08 ... 381,92 MHz		—	1,0	1,5	degree
Attenuation	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

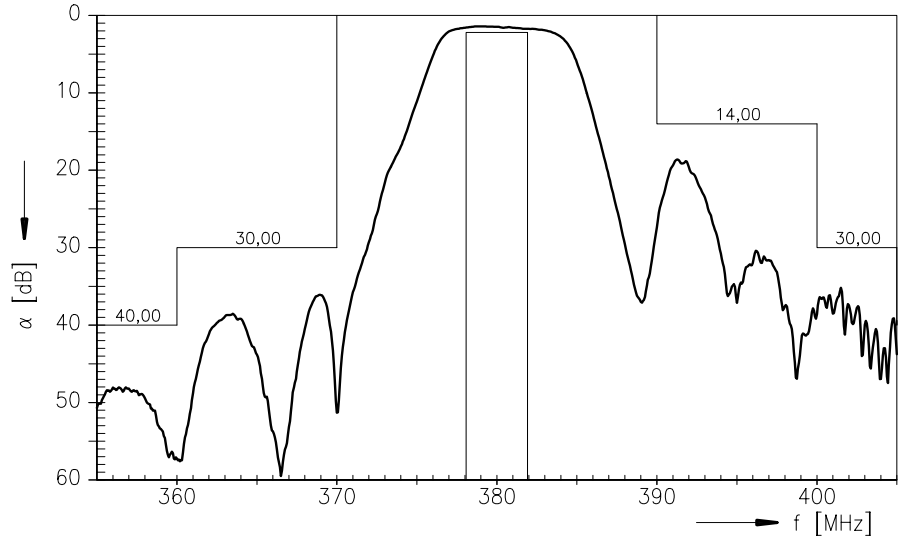
Operating temperature range: T = -20 to +75˚C
Terminating source impedance: Z_S = 200 Ω
Terminating load impedance: Z_L = 200 Ω

		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

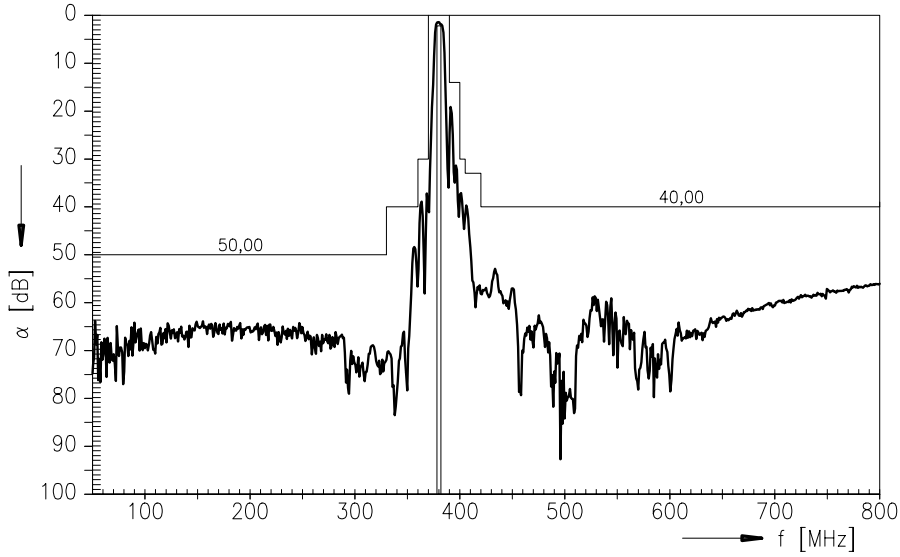
Transfer function (pass band)



Transfer function (narrow band)



Transfer function (wide band)



Published by EPCOS AG
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.