

[查询"B3883"供应商](#)



SAW Components

Data Sheet B3883

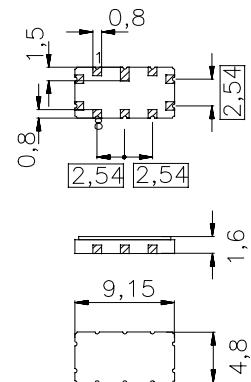


SAW Components**B3883****Low-Loss Filter****168,96 MHz****Data Sheet**Ceramic package **QCC10B****Features**

- Low-loss IF filter
- Multichannel CDMA2000 & W-CDMA capable
- Balanced operation possible
- Hermetically sealed ceramic SMD package

Terminals

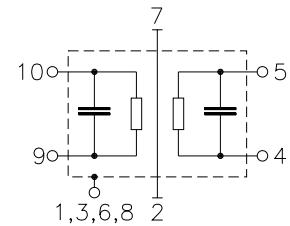
- Gold plated



Dimensions in mm, approx. weight 0,23 g

Pin configuration

10	Input
9	Input ground
5	Output
4	Output ground or balanced output
2, 7	Ground
1, 3, 6, 8	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3883	B39171-B3883-Z710	C61157-A7-A49	F61074-V8172-Z000

Electrostatic Sensitive Device (ESD)**Maximum ratings**

Operable temperature range	T	-40/ +85	°C	
Storage temperature range	T_{stg}	-40/ +85	°C	
DC voltage	V_{DC}	5	V	
Source power	P_s	10	dBm	

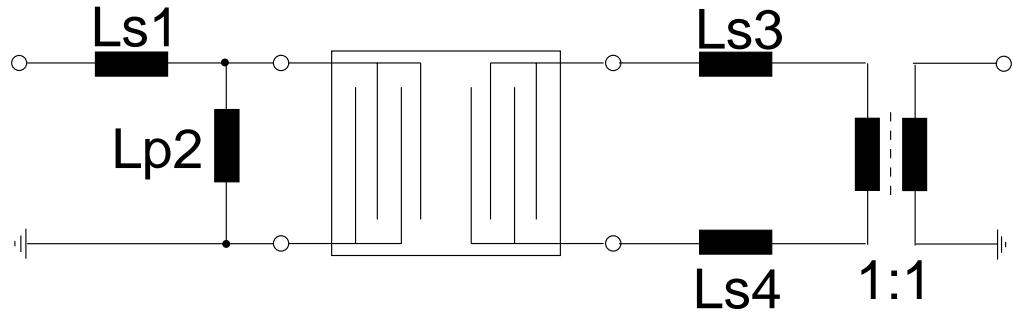
SAW Components		B3883					
Low-Loss Filter		168,96 MHz					
Data Sheet							
Characteristics							
Operating temperature: $T = 0 \dots +85^\circ\text{C}$							
Terminating source impedance: $Z_S = 50 \Omega$ single ended and matching network.							
Terminating load impedance: $Z_S = 75 \Omega$ balanced and matching network.							
Nominal frequency	f_N	min.	typ.	max.			
		—	168,96	—			
Minimum insertion attenuation (including matching network)	α_{\min}	—	8,0	9,5			
		—	—	dB			
Passband width							
$\alpha_{\text{rel}} \leq 1 \text{ dB}$	$B_{1\text{dB}}$	—	14,5	—			
$\alpha_{\text{rel}} \leq 5 \text{ dB}$	$B_{5\text{dB}}$	—	18,5	—			
$\alpha_{\text{rel}} \leq 30 \text{ dB}$	$B_{30\text{dB}}$	—	19,5	—			
Amplitude ripple (p-p)	$\Delta\alpha$						
$f_N \pm 6,95 \text{ MHz}$		—	1,5	2,0			
		—	—	dB			
Group delay ripple (p-p)	$\Delta\tau$						
$f_N \pm 6,95 \text{ MHz}$		—	70	100			
		—	—	ns			
Phase Linearity¹⁾ (rms)	$\Delta\phi$						
$f_N - 5,0 \text{ MHz} \pm 1,92 \text{ MHz}$		—	1,2	2,0			
$f_N \pm 1,92 \text{ MHz}$		—	1,6	2,0			
$f_N + 5,0 \text{ MHz} \pm 1,92 \text{ MHz}$		—	1,0	2,0			
$f_N + k*1,25 \text{ MHz} \pm 0,6144 \text{ MHz}$		—	1,3	2,0			
Average Error Vector Magnitude							
$f_N - 5,0 \text{ MHz} \pm 1,92 \text{ MHz}$	EVM	—	3,0	4,0			
$f_N \pm 1,92 \text{ MHz}$		—	3,8	4,5			
$f_N + 5,0 \text{ MHz} \pm 1,92 \text{ MHz}$		—	3,2	4,0			
$f_N + k*1,25 \text{ MHz} \pm 0,6144 \text{ MHz}$		—	3,3	4,0			
Relative attenuation (relative to α_{\min})							
$f_N - 17,5 \text{ MHz} \dots$	$f_N - 66,0 \text{ MHz}$	α_{rel}	40	43			
$f_N + 17,5 \text{ MHz} \dots$	$f_N + 19,5 \text{ MHz}$		39	42			
$f_N + 19,5 \text{ MHz} \dots$	$f_N + 23,5 \text{ MHz}$		33	43			
$f_N + 23,5 \text{ MHz} \dots$	$f_N + 66,0 \text{ MHz}$		40	44			
Temperature coefficient of frequency	TC_f	—	-87	—			
		—	—	ppm/K			

¹⁾ Phase Linearity: where $k = (-5, -4 \dots +5)$

SAW Components	B3883
Low-Loss Filter	168,96 MHz

Data Sheet

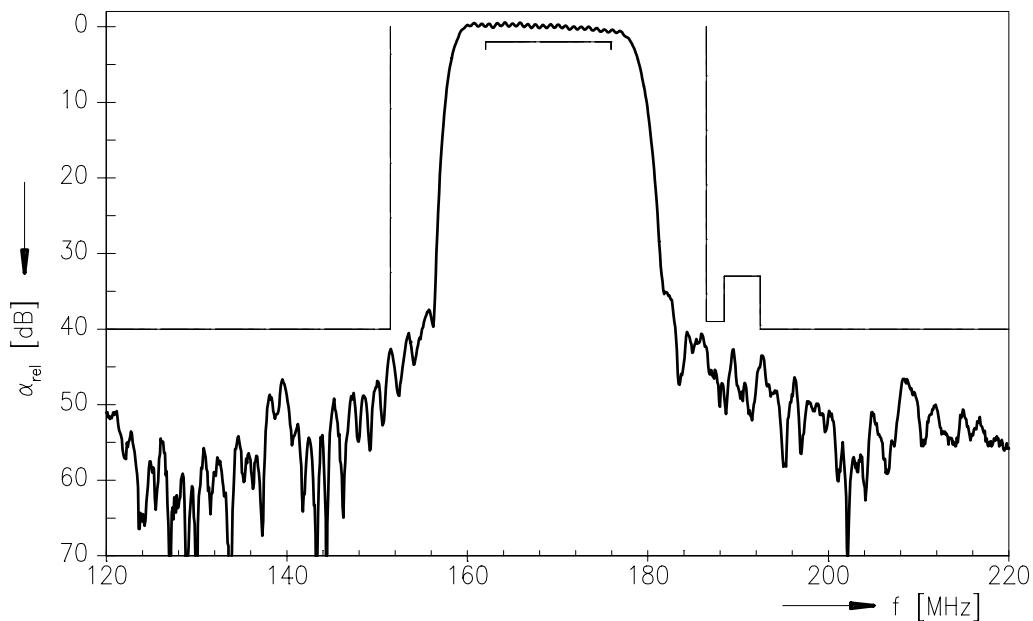
Matching network (Element values depend upon PCB layout):



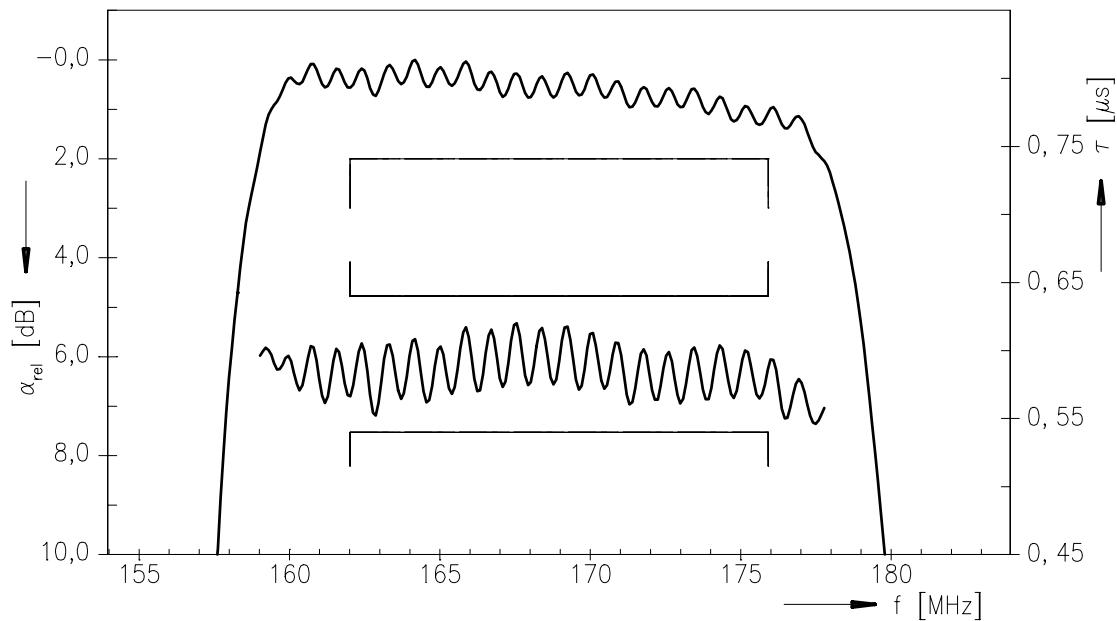
$L_{s1} = 180 \text{ nH}$
 $L_{p2} = 390 \text{ nH}$

$L_{s3} = 82 \text{ nH}$
 $L_{s4} = 82 \text{ nH}$

Normalized frequency response



Normalized frequency response (pass band)



[查询"B3883"供应商](#)



SAW Components	B3883
Low-Loss Filter	168,96 MHz
Data Sheet	

Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC PD

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2004. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

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.