SAW filters for infrastructure systems

Series/Type: B3807

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39331B3807U310		2012-01-13	2012-12-31	2013-03-30

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.

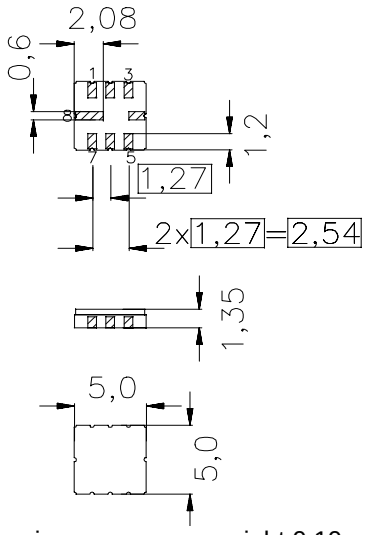
Ceramic package **QCC8C**

Features

- Low-loss IF filter for W-CDMA base station
- Usable bandwidth 15 MHz
- Ceramic SMD package

Terminals

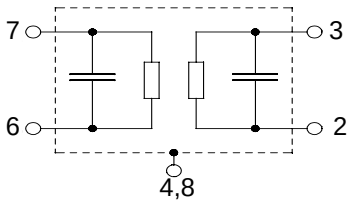
- Gold plated



Dimensions in mm, approx. weight 0,10 g

Pin configuration

7	Input
6	Input Ground
3	Output
2	Output Ground
1, 4, 5, 8	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B3807	B39331-B3807-U310	C61157-A7-A56	F61074-V8070-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	15	dBm	

Data Sheet

Characteristics

Operating temperature: T = -10 .. +80 °C

Terminating source impedance: Z_S=50 Ω and matching network

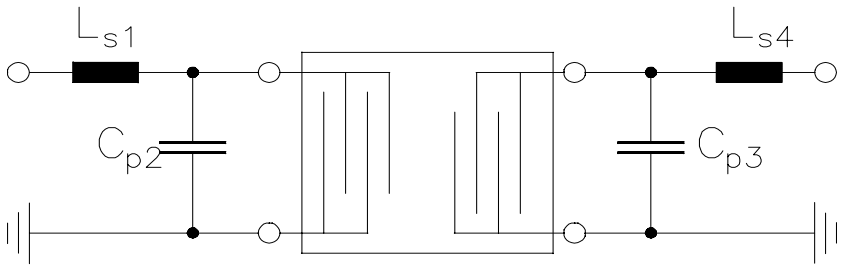
Terminating load impedance: Z_S=50 Ω and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	326,4	—	MHz
Minimum insertion attenuation	α_{min}	—	2,0	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
f_N-2,5 MHz...f_N+2,5 MHz		—	0,3	0,5	dB
f_N-7,5 MHz...f_N+7,5 MHz		—	1,0	3,0	dB
Pass bandwidth	$B_{1,0dB}$				
$\alpha_{rel} \leq$ 1,0 dB		—	15	—	MHz
	B_{10dB}				
$\alpha_{rel} \leq$ 10 dB		—	20	—	MHz
Relative attenuation (relative to α_{min})	α_{rel}				
10,0 MHz ... f_N – 18,0 MHz		40	50	—	dB
f_N –38,395 MHz ... f_N –38,405 MHz		43	50	—	dB
f_N –19,195 MHz ... f_N –19,205 MHz		43	50	—	dB
f_N – 18,0 MHz ... f_N – 12,5 MHz		13	15	—	dB
f_N + 12,5 MHz ... f_N + 30,0 MHz		11	13	—	dB
f_N + 30,0 MHz ... f_N + 450,0 MHz		25	30	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
f_N- 7,5 MHz...f_N- 2,5 MHz		—	90	110	ns
f_N- 2,5 MHz...f_N+2,5 MHz		—	15	25	ns
f_N+2,5 MHz...f_N+7,5 MHz		—	50	65	ns
Return Loss					
f_N-2,5 MHz...f_N+2,5 MHz		10	11	—	dB
f_N-7,0 MHz...f_N+7,0 MHz		8	10	—	dB
f_N-7,5 MHz...f_N+7,5 MHz		5	8	—	dB
Impedance at f_N (without matching)[1]					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	72 || 0,4	—	Ω || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	73 || 0,2	—	Ω || pF
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

[1](port extensions directly at filter)

Matching network to 50 Ω

(Element values depend upon PCB layout)



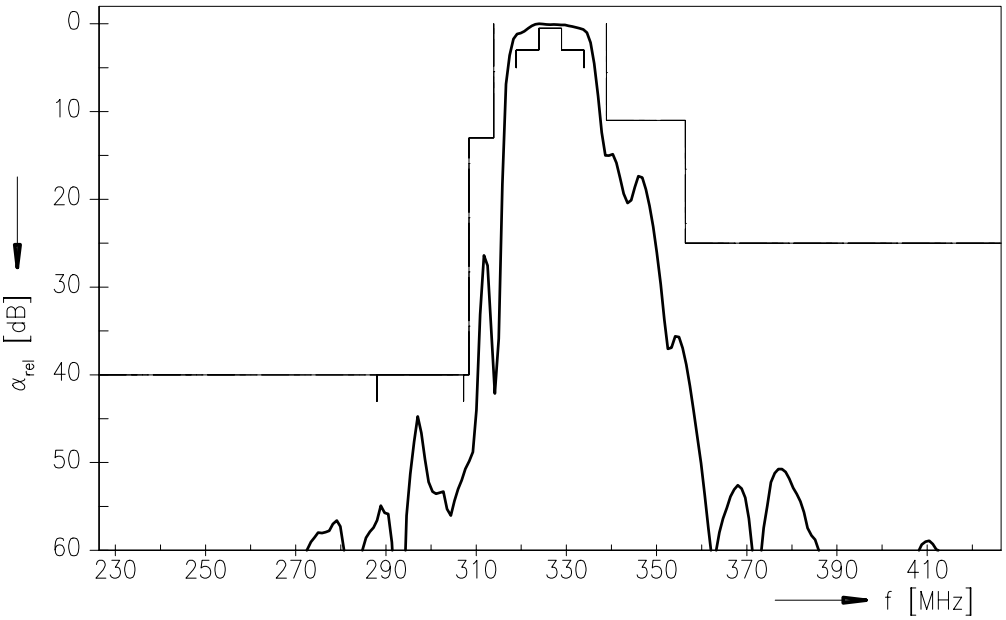
L_{s1} = 22 nH

C_{p2} = 2,7 pF

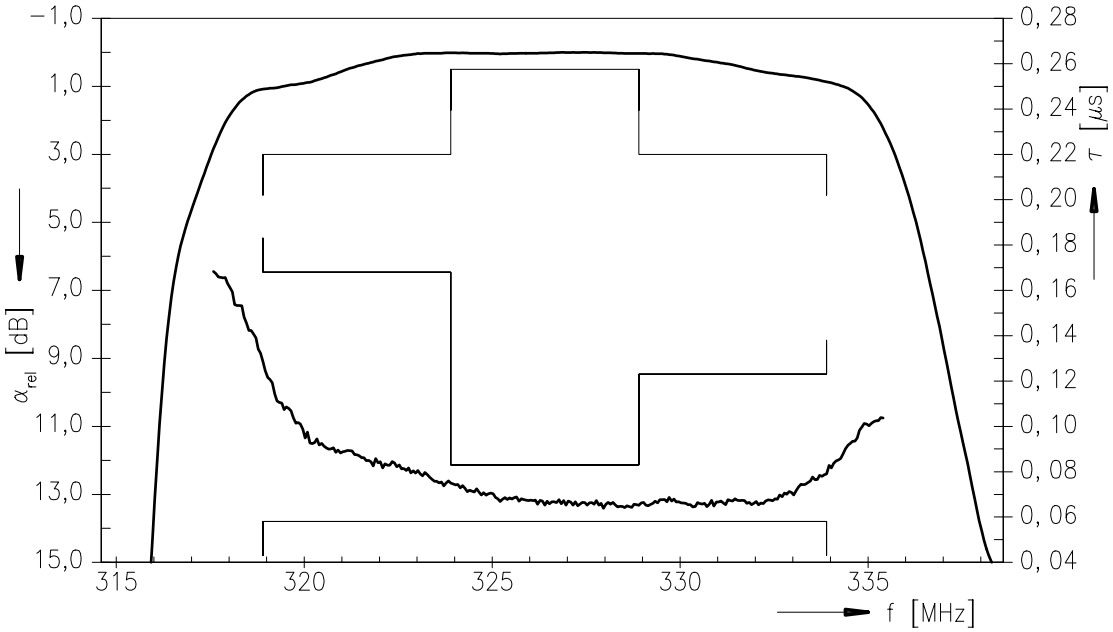
C_{p3} = 2,7 pF

L_{s4} = 22 nH

Normalized frequency response



Normalized frequency response (pass band)



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

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Qualcomm RF360:

B39331B3807U310