



SAW filters for mobile communications

Series/Type: B4218

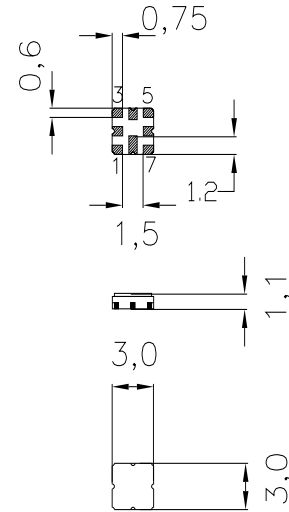
The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39192B4218U810		2009-07-31	2009-11-30	2010-02-28

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 **QCC8D**
Features

- Low-loss 2-in-1 RF filter for mobile telephone PCS systems, transmit path
- Device with two integrated Tx-filter
- Usable passband of Tx-filter 1 30 MHz
- Usable passband of Tx-filter 2 30 MHz
- No matching network required for operation at 50 Ω
- Package for **Surface Mounted Technology (SMT)**



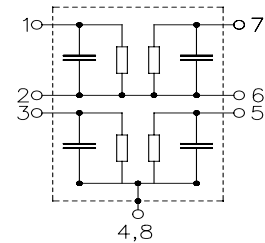
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold-plated

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4218	B39192-B4218-U810	C61157-A7-A72	F61074-V8101-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40 /+ 85	°C	source and load impedance 50 Ω continuous wave
Storage temperature range	T_{stg}	- 40 /+ 85	°C	
DC voltage	V_{DC}	3	V	
Input power max. 1850...1910 MHz	P_{IN}	10	dBm	


Characteristics of Tx-filter 1

Operating temperature range: $T = -30 \text{ to } +85 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \ \Omega$
 Terminating load impedance: $Z_L = 50 \ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1865,0	—	MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1880,0	MHz	—	1,8	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1880,0	MHz	—	0,7	1,4	dB
Input return loss						
	1850,0 ... 1880,0	MHz	9,0	10,0	—	dB
Output return loss						
	1850,0 ... 1880,0	MHz	9,0	10,0	—	dB
Attenuation	α					
	10,0 ... 1570,0	MHz	25,0	29,0	—	dB
	1570,0 ... 1580,0	MHz	30,0	32,0	—	dB
	1580,0 ... 1780,0	MHz	29,0	32,0	—	dB
	1780,0 ... 1800,0	MHz	25,0	30,0	—	dB
	1800,0 ... 1805,0	MHz	20,0	26,0	—	dB
	1930,0 ... 1960,0	MHz	38,0	45,0	—	dB
	1960,0 ... 2400,0	MHz	32,0	35,0	—	dB
	2400,0 ... 3000,0	MHz	22,0	32,0	—	dB
	3000,0 ... 4000,0	MHz	15,0	19,0	—	dB
	5550,0 ... 5640,0	MHz	0,0	5,0	—	dB
Rx band suppression	α					
	1930,0 ... 1960,0	MHz	38,0	45,0	—	dB
LO suppression	α					
	2113,0 ... 2174,0	MHz	32,0	35,0	—	dB

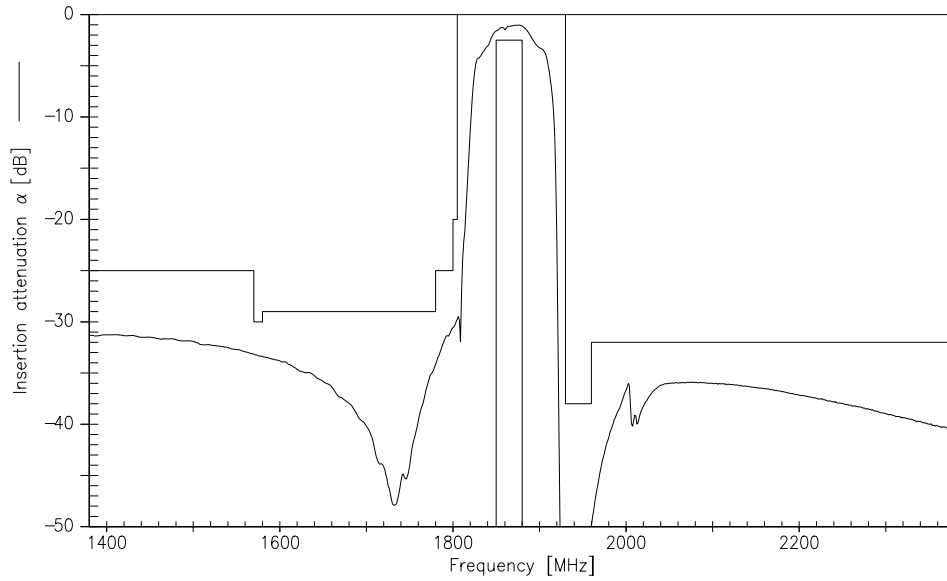

Characteristics of Tx-filter 2

Operating temperature range: $T = -30$ to $+85$ °C
 Terminating source impedance: $Z_S = 50$ Ω
 Terminating load impedance: $Z_L = 50$ Ω

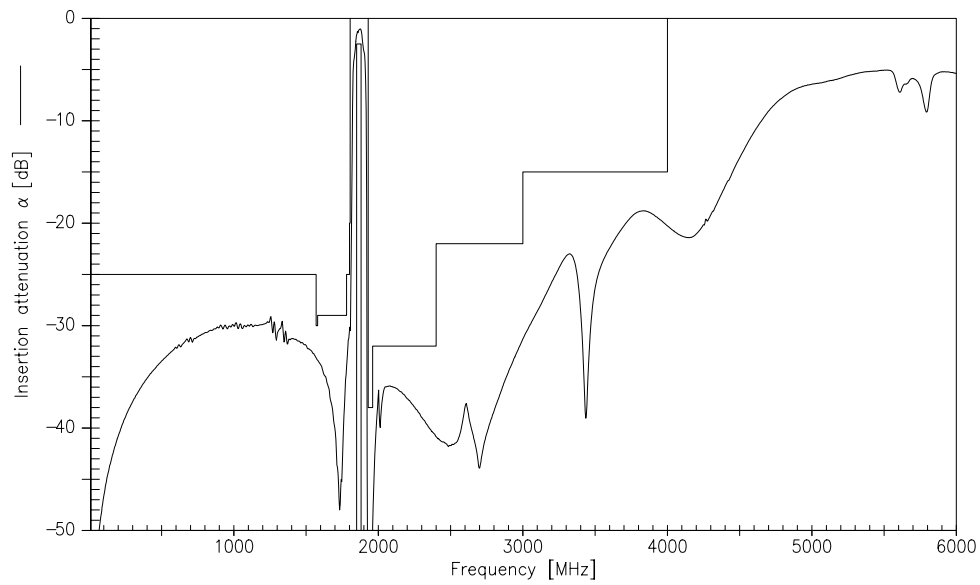
				min.	typ.	max.	
Center frequency		f_c		—	1895,0	—	MHz
Maximum insertion attenuation	1880,0 ... 1910,0	MHz	α_{max}	—	1,8	2,5	dB
Amplitude ripple (p-p)	1880,0 ... 1910,0	MHz	$\Delta\alpha$	—	0,7	1,4	dB
Input return loss	1880,0 ... 1910,0	MHz		9,0	10,0	—	dB
Output return loss	1880,0 ... 1910,0	MHz		9,0	10,0	—	dB
Attenuation			α				
	10,0 ... 1570,0	MHz		25,0	29,0	—	dB
	1570,0 ... 1580,0	MHz		30,0	32,0	—	dB
	1580,0 ... 1780,0	MHz		29,0	32,0	—	dB
	1780,0 ... 1800,0	MHz		25,0	30,0	—	dB
	1800,0 ... 1830,0	MHz		22,0	29,0	—	dB
	1960,0 ... 1990,0	MHz		38,0	45,0	—	dB
	1990,0 ... 2400,0	MHz		32,0	35,0	—	dB
	2400,0 ... 3000,0	MHz		22,0	30,0	—	dB
	3000,0 ... 4000,0	MHz		15,0	19,0	—	dB
	5640,0 ... 5730,0	MHz		0,0	5,0	—	dB
Rx band suppression	1960,0 ... 1990,0	MHz	α	38,0	45,0	—	dB
LO suppression	2113,0 ... 2174,0	MHz	α	32,0	35,0	—	dB



Transfer function Tx-filter 1

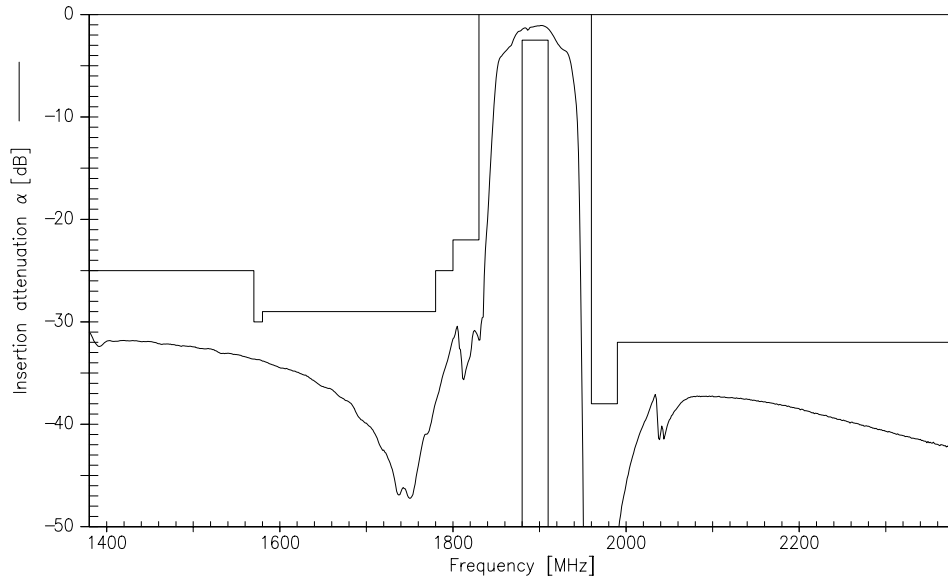


Transfer function Tx-filter 1(wideband)

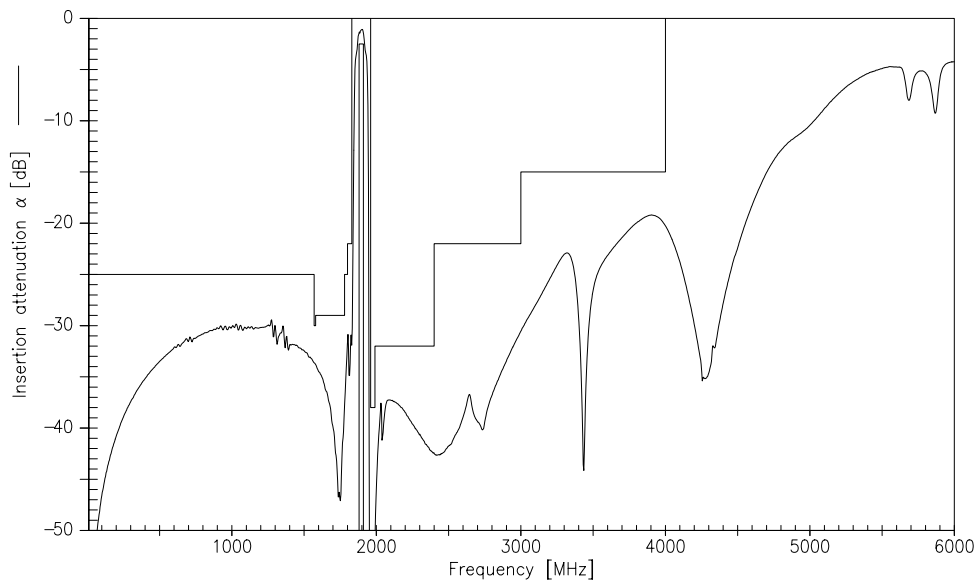




Transfer function Tx-filter 2

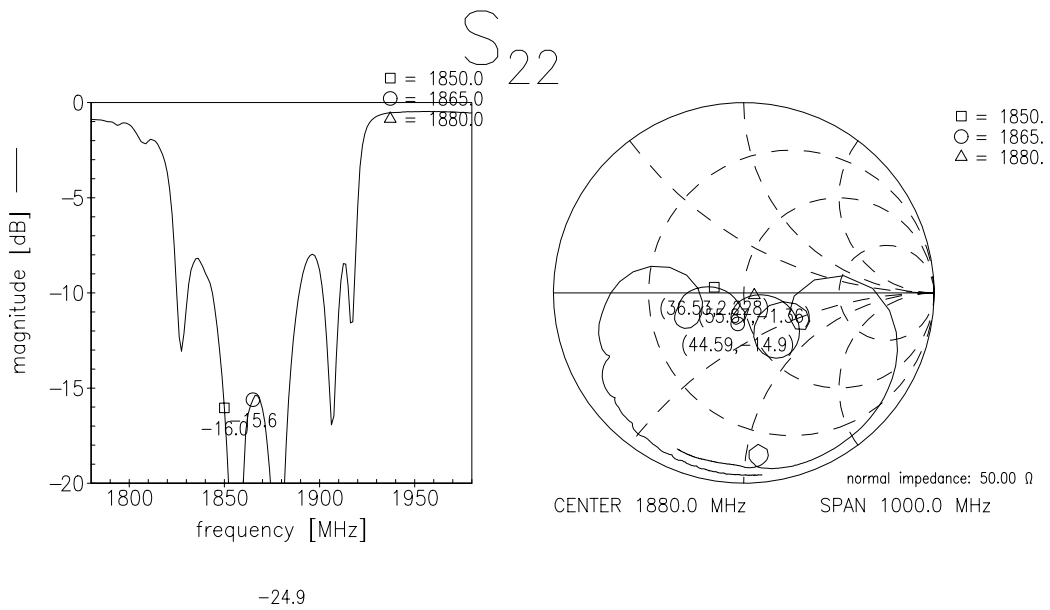
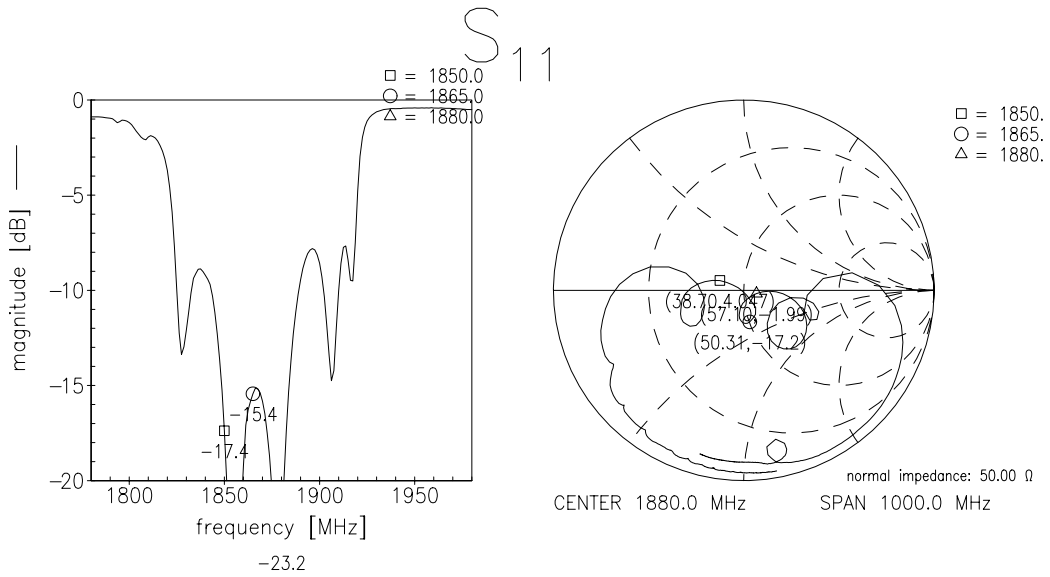


Transfer function Tx-filter 2(wideband)



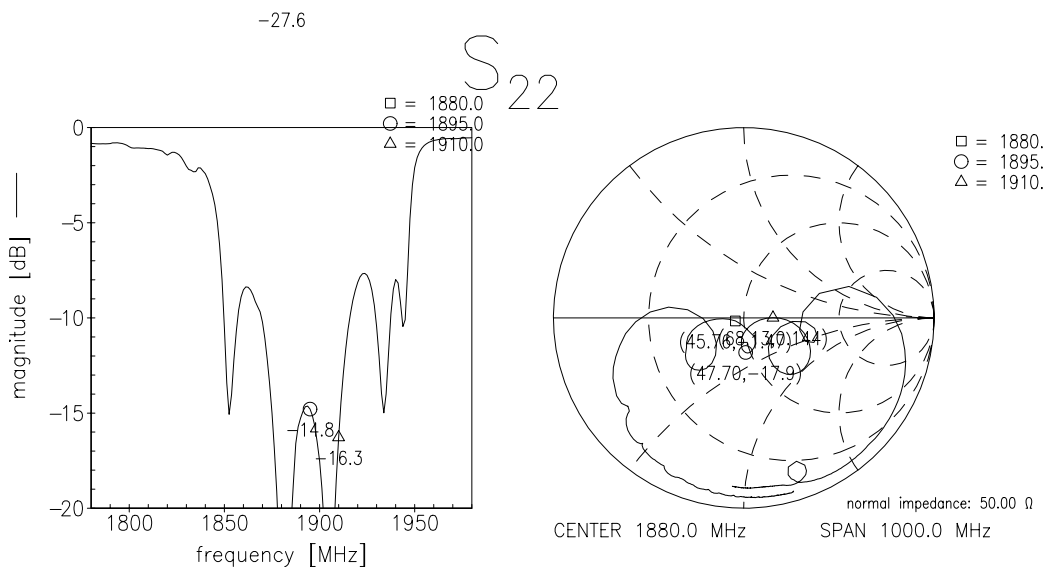
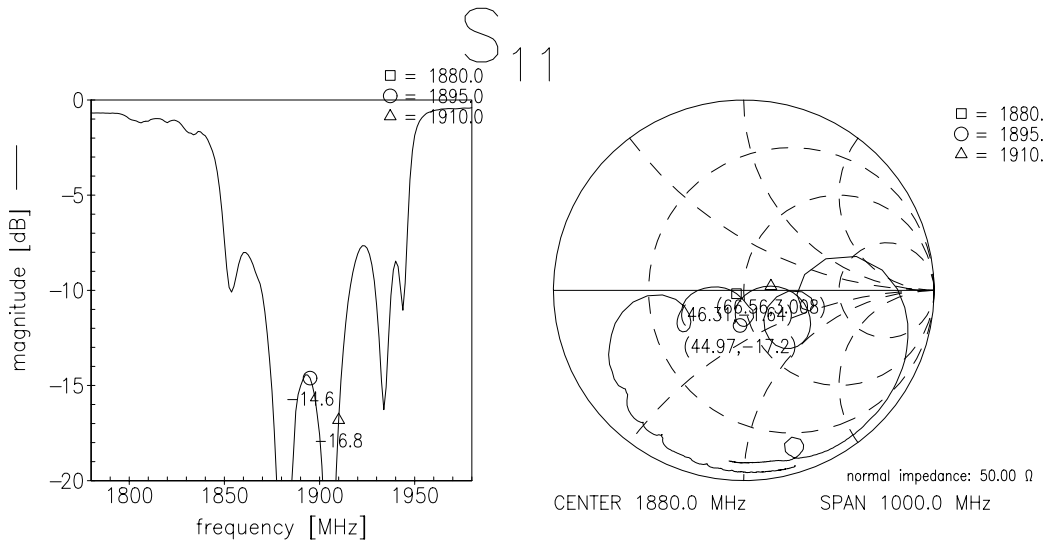


Reflection functions of Tx-filter 1





Reflection functions of Tx-filter 2



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