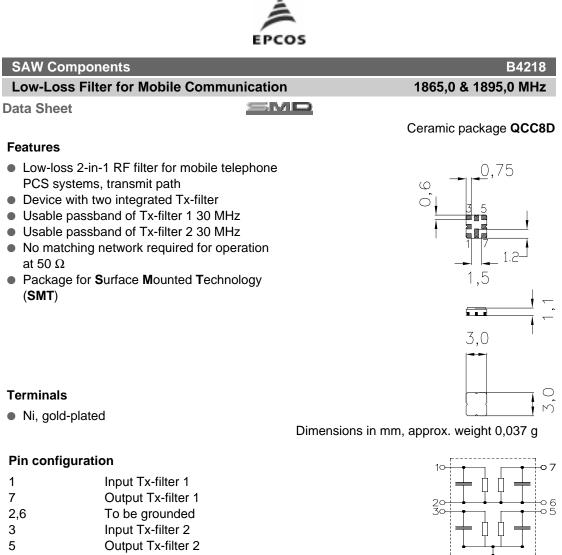


SAW Components

Data Sheet B4218





4,8	Case-ground.	to be grounded

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

4,8

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	Т	- 40 /+ 85	°C	
Storage temperature range	T _{stg}	– 40 /+ 85	°C	
DC voltage	V _{DC}	3	V	
Input power max. 18501910 MHz	P _{IN}	10	dBm	source and load impedance 50 Ω continuous wave



SAW Components						B4218
Low-Loss Filter for Mobile Communication 1865,0 & 1895,0 M						
Data Sheet						
Characteristics of Tx-filter 1						
Operating temperature range:	Т	= -30 to	o +85 °C			
Terminating source impedance:		= 50 Ω				
Terminating load impedance:	Z_{L}	= 50 Ω				
			min.	typ.	max.	
Center frequency		f _c	_	1865,0	_	MHz
Maximum insertion attenuation		α_{max}				
1850,01880,	0 MHz		—	1,8	2,5	dB
Amplitude ripple (p-p)	0 MIL-	Δα		0.7		
1850,01880,	0 MHz		_	0,7	1,4	dB
Input return loss						
1850,01880,	0 MHz		9,0	10,0		dB
1000,0 1000,			5,0	10,0		UD .
Output return loss						
1850,01880,	0 MHz		9,0	10,0		dB
Attenuation		α				
10,01570,			25,0	29,0		dB
1570,01580,			30,0	32,0		dB
1580,01780,			29,0	32,0	_	dB
1780,0 1800,			25,0	30,0		dB
1800,01805, 1930,01960,			20,0	26,0		dB dB
1930,01960, 1960,02400,			38,0 32,0	45,0 35,0		dВ
2400,02400,			32,0 22,0	32,0	_	dВ
3000,04000,			15,0	19,0	_	dB
5550,05640,			0,0	5,0		dB
,,						
Rx band suppression		α				
1930,01960,	0 MHz		38,0	45,0	—	dB
LO suppression		α				
2113,02174,	0 MHz		32,0	35,0	-	dB

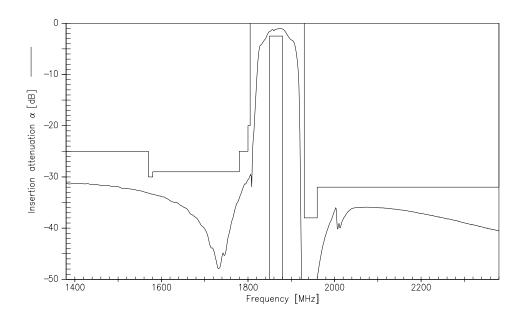


Low-Loss Filter for Mobile Communication 1865,0 & 1895,0 MHz Data Sheet Characteristics of Tx-filter 2 Operating temperature range: $Z_{\rm S} = 50 \ \Omega$ Terminating source impedance: $Z_{\rm S} = 50 \ \Omega$ Terminating load impedance: $Z_{\rm L} = 50 \ \Omega$ Center frequency n. MHz Maximum insertion attenuation 1880,01910,0 MHz α_{max} 1,8 2,5 dB Maximum insertion attenuation 1880,01910,0 MHz α_{max} 1,8 2,5 dB Maximum insertion attenuation 1880,01910,0 MHz α_{max} - 0,7 1,4 dB Output return loss 1880,01910,0 MHz 9,0 10,0 - dB Attenuation α - - dB 180,01910,0 MHz 2,5,0 <th colspan<="" th=""><th>SAW Components</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>B4218</th></th>	<th>SAW Components</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>B4218</th>	SAW Components								B4218
Analysis Characteristics of Tx-filter 2 Operating temperature range: $T = -30 \text{ to } +85 ^{\circ}\text{C}$ Terminating source impedance: $Z_{\text{S}} = 50 \Omega$ Terminating load impedance: $Z_{\text{L}} = 50 \Omega$ Center frequency f_{c} - MHz Maximum insertion attenuation α_{max} - 1.8 2,5 dB Maximum insertion attenuation α_{max} - 1.1,8 2,5 dB Maximum insertion attenuation α_{max} - 1,8 2,5 dB Maximum insertion attenuation α_{max} - 1,8 2,5 dB Amplitude ripple (p-p) $\Delta \alpha$ - 0,7 1,4 dB Output return loss 1880,0 1910,0 MHz 9,0 1	Low-Loss Filter for Mobile Communication 1865,0 & 1895,0 MHz							,0 MHz		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Data Sheet			<u>_</u>						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Characteristics of Tx-fil	ter 2								
Terminating load impedance: $Z_{L}^{-} = 50 \Omega$ min. typ. max. Center frequency f_{c} - 1895,0 - MHz Maximum insertion attenuation 1880,0 α_{max} - 1,8 2,5 dB Amplitude ripple (p-p) 1880,0 $\Delta \alpha$ - 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 α - dB - dB Attenuation α α - dB 1570,0 190,0 MHz 29,0 10,0 - dB 1580,0 1910,0 MHz 25,0 29,0 - dB Attenuation α 25,0 29,0 - dB 1570,0 180,0 MHz 29,0 32,0 - dB 1580,0 180,0 MHz 22,0 33,0 45,0	Operating temperature ra	inge:		Т	= -30 to	o +85 °C				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $:							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Terminating load impedar	nce:		Z_{L}						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						min.	typ.	max.		
Maximum insertion attenuation 1880,0 α_{max} 1,8 2,5 dB Amplitude ripple (p-p) 1880,0 $\Delta \alpha$ 1880,0 $\Delta \alpha$ 1,8 2,5 dB Input return loss 1880,0 $1880,0$ 1910,0 MHz 0,7 1,4 dB Output return loss 1880,0 $1880,0$ 1910,0 MHz 9,0 10,0 dB Attenuation α α α α α α α α Attenuation α α α α α α α Rx band suppression α α α α α α α	Center frequency				f _c		1895,0		MHz	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,				0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Maximum insertion atte	nuati	on		α_{max}					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	380,0	1910,0	MHz	max	—	1,8	2,5	dB	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Amplitude ripple (p-p)				Δα					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	380,0	1910,0	MHz		—	0,7	1,4	dB	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
Output return loss1880,01910,0MHz9,010,0dBAttenuation α dB10,01570,0MHz25,029,0dB1570,01580,0MHz30,032,0dB1580,01780,0MHz29,032,0dB1780,01800,0MHz25,030,0dB1960,01990,0MHz38,045,0dB1990,02400,0MHz32,035,0dB2400,03000,0MHz15,019,0dB3000,04000,0MHz15,019,0dB5640,05730,0MHz0,05,0dBRx band suppression α 38,045,0dBLO suppression α 196,01990,0MHz38,045,0dB	•									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18	380,0	1910,0	MHz		9,0	10,0	—	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
Attenuation α α β β 10,01570,0MHz25,029,0dB1570,01580,0MHz30,032,0dB1580,01780,0MHz29,032,0dB1780,01800,0MHz25,030,0dB1800,01830,0MHz22,029,0dB1960,01990,0MHz38,045,0dB1990,02400,0MHz32,035,0dB2400,03000,0MHz15,019,0dB3000,04000,0MHz15,019,0dB5640,05730,0MHz0,05,0dB1960,01990,0MHz38,045,0dBLO suppression α α dB	•	000 0	1010.0			0.0	10.0		dD	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	IC	500,0	1910,0			9,0	10,0		ив	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Attenuation				a					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Altonution	10.0	1570.0	MHz	~	25.0	29.0	_	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	15							_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				MHz				—	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	17	780,0	1800,0	MHz		25,0	30,0	_	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18	300,0	1830,0	MHz		22,0	29,0	—	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								—	dB	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								—		
5640,0 5730,0 MHz 0,0 5,0 — dB Rx band suppression α 38,0 45,0 — dB LO suppression α Δ 38,0 45,0 — dB								-		
Rx band suppression α β 45,0 d d LO suppression α α 45,0 d d										
1960,0 1990,0 MHz 38,0 45,0 — dB LO suppression α	56	640,0	5730,0	MHz		0,0	5,0		dB	
1960,0 1990,0 MHz 38,0 45,0 — dB LO suppression α	Py hand ourpression									
LO suppression α		0 0.0	1000 0	МН≁	α	38 N	45.0		dB	
		,00,0	1990,0		a	50,0				
		13 0	2174 0	MHz	~	32.0	35.0		dB	
	21	,0	, , , , , , , , , , , , , , , , ,			02,0	00,0			

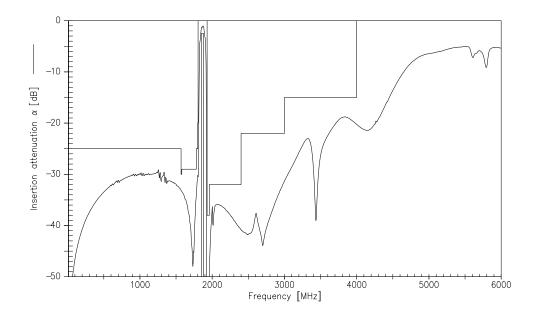
4



Transfer function Tx-filter 1

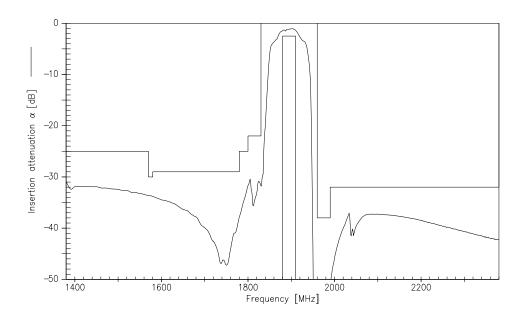


Transfer function Tx-filter 1(wideband)

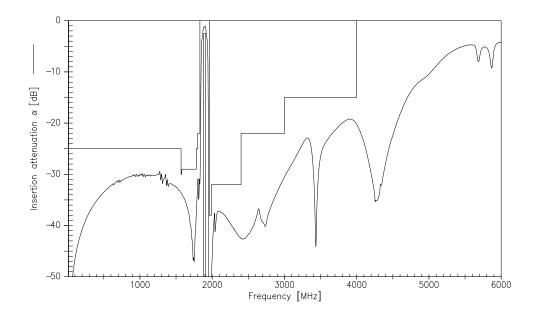




Transfer function Tx-filter 2

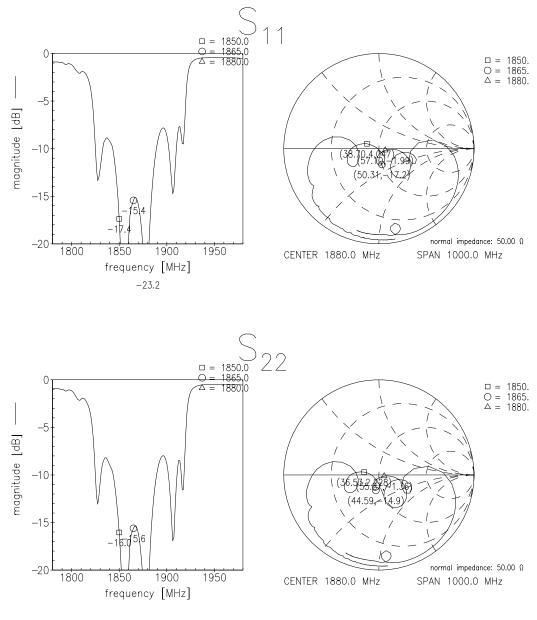


Transfer function Tx-filter 2(wideband)





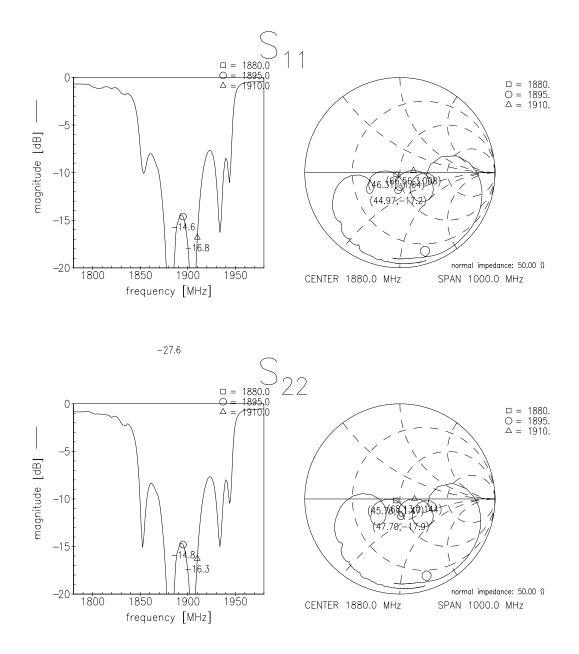
Reflection functions of Tx-filter 1







Reflection functions of Tx-filter 2





SAW Components		B4218
Low-Loss Filter for Mobile Commun	nication	1865,0 & 1895,0 MHz
Data Sheet	SMD	

Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC WT P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2000. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. 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.

