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RF Filters for Cellular Phones

Series/Type: B4168

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39202B4168U410	B39202B4150U410	2009-04-03	2009-07-15	2009-10-15

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.



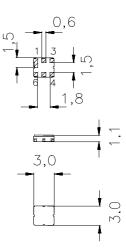
SAW Components		B4168
Low-Loss Filter for Mob	ile Communication	1960,0 MHz
Data Sheet		
		Ceramic package DCC6C

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Suitable for GPRS class 1 to 12
- Ceramic Package for Surface Mounted Technology (SMT)

Terminals

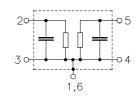
• Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
1, 3	Input - ground
5	Output
4, 6	Output - ground



Туре	Ordering code	Marking and Package	Packing
		according to	according to
B4168	B39202-B4168-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	Т	- 30/+ 75	°C	
Storage temperature range	T _{stg}	– 40/+ 85	°C	
DC voltage	V _{DC}	3	V	
Input power at				
GSM850, GSM900	P _{IN}	15	dBm	peak power of GSM signal,
GSM1800, GSM1900	P _{IN}	12	dBm	duty cycle 4:8
Tx bands				

2



SAW Components							B4168
Low-Loss Filter for Mobile Communication						1960,	0 MHz
Data Sheet		SM					
Characteristics							
Operating temperature range:		Т	= +25 +	2°C			
Terminating source impedance	e:		= 50 Ω				
Terminating load impedance:		Z_{L}	= 50 Ω				
				min.	typ.	max.	
Center frequency			f _c	—	1960,0		MHz
Maximum insertion attenuat	ion						
	1990,0	MHz	α_{max}	_	2,7	3,5	dB
1000,0	1000,0				2,1	0,0	
Amplitude ripple (p-p)			Δα				
1930,0	1990,0	MHz		—	1,4	2,2	dB
Input VSWR	4000.0	N 41 1_			1.0	0.4	
1930,0	1990,0	MHz		_	1,9	2,1	
Output VSWR							
1930,0	1990,0	MHz		_	1,9	2,1	
Attenuation			α				
10,0	1850,0	MHz	u	23,0	25,0		dB
1850,0		MHz		20,0 10,5	14,0	_	dB
2010,0	•	MHz		10,5	15,0	_	dB
2070,0		MHz		25,0	29,0	—	dB
2410,0	2910,0	MHz		33,0	37,0	—	dB
2910,0		MHz		25,0	29,0	—	dB
4500,0		MHz		20,0	26,0	—	dB
5000,0	6000,0	MHz		8,0	10,0	—	dB



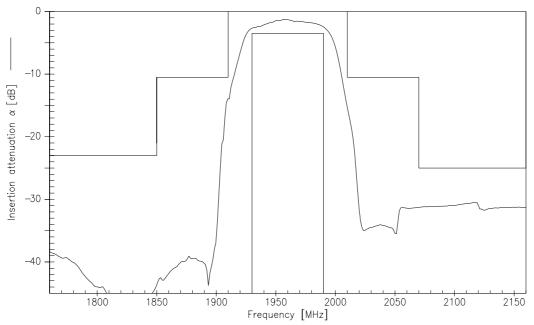


SAW Components						B4168
Low-Loss Filter for Mobile Communication					1960,	0 MHz
Data Sheet	SM					
Characteristics						
Operating temperature range:	Т		o +75°C			
Terminating source impedance:	Z_{S}	= 50 Ω				
Terminating load impedance:	Z_{L}	= 50 Ω				
			min.	typ.	max.	
Center frequency		f _c	—	1960,0		MHz
Maximum insertion attenuation		α_{max}				
1930,01990,0	MHz		—	2,7	4,3	dB
Amplitude ripple (p-p)		Δα				
1930,01990,0	MHz		—	1,4	3,0	dB
Input VSWR						
1930,01990,0	MHz		_	1,9	2,1	
Output VSWR						
1930,01990,0	MHz		—	1,9	2,1	
A.L						
Attenuation 10,0 1850,0	MHz	α	23,0	25,0		dB
1850,0 1910,0	MHz		23,0 8,5	23,0 14,0	_	dВ
2010,02070,0	MHz		8,5	15,0	_	dB
2070,02410,0	MHz		25,0	29,0	_	dB
2410,02910,0	MHz		33,0	37,0	_	dB
2910,04500,0	MHz		25,0	29,0	—	dB
4500,05000,0	MHz		20,0	26,0	—	dB
5000,06000,0	MHz		8,0	10,0	—	dB

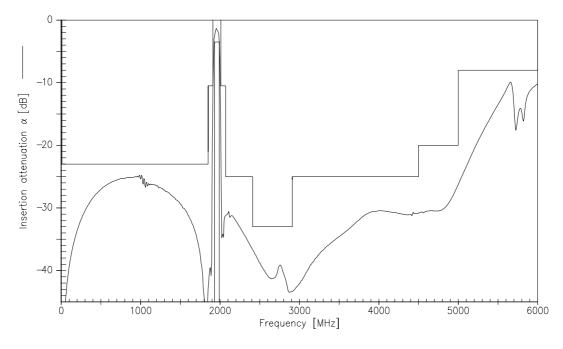
4 Jun 05, 2002



Transfer function(Spec for 25°C):



Transfer function(wideband):



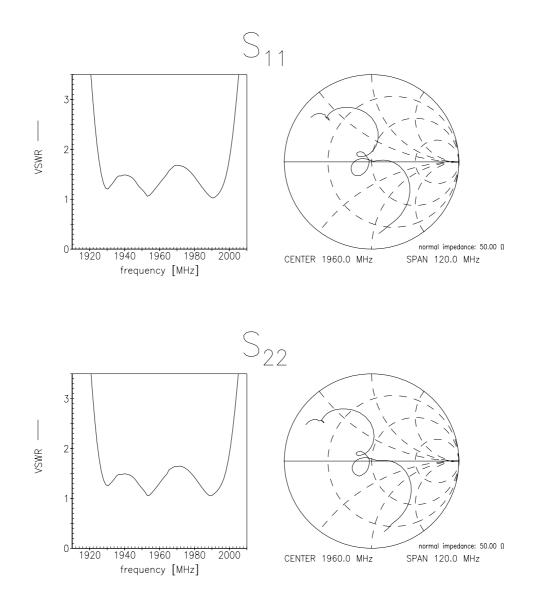
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Jun 05, 2002



SAW Components	B4168	
Low-Loss Filter for Mol	bile Communication	1960,0 MHz
Data Sheet	SMD	

Reflection functions:



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SAW Components	B4168	
Low-Loss Filter for Mo	1960,0 MHz	
Data Sheet	SMD	

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