



SAW Components

Data Sheet B4168

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns, suggesting a global network or technological theme. The overall color scheme is dark with blue and white highlights.



SAW Components

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Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



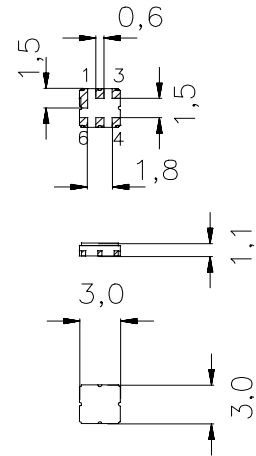
Ceramic package **DCC6C**

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

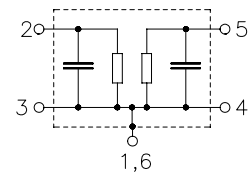
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



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

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30/+ 75	$^{\circ}\text{C}$	peak power of GSM signal, duty cycle 4:8
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	3	V	
Input power at				
GSM850, GSM900	P_{IN}	15	dBm	
GSM1800, GSM1900	P_{IN}	12	dBm	
Tx bands				



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Characteristics

Operating temperature range: $T = +25 \pm 2^\circ \text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ...1990,0	MHz	—	2,7	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1930,0 ...1990,0	MHz	—	1,4	2,2	dB
Input VSWR						
	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	23,0	25,0	—	dB
	1850,0 ...1910,0	MHz	10,5	14,0	—	dB
	2010,0 ...2070,0	MHz	10,5	15,0	—	dB
	2070,0 ...2410,0	MHz	25,0	29,0	—	dB
	2410,0 ...2910,0	MHz	33,0	37,0	—	dB
	2910,0 ...4500,0	MHz	25,0	29,0	—	dB
	4500,0 ...5000,0	MHz	20,0	26,0	—	dB
	5000,0 ...6000,0	MHz	8,0	10,0	—	dB



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Characteristics

Operating temperature range: $T = -10$ to $+75^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ...1990,0	MHz	—	2,7	4,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1930,0 ...1990,0	MHz	—	1,4	3,0	dB
Input VSWR						
	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	23,0	25,0	—	dB
	1850,0 ...1910,0	MHz	8,5	14,0	—	dB
	2010,0 ...2070,0	MHz	8,5	15,0	—	dB
	2070,0 ...2410,0	MHz	25,0	29,0	—	dB
	2410,0 ...2910,0	MHz	33,0	37,0	—	dB
	2910,0 ...4500,0	MHz	25,0	29,0	—	dB
	4500,0 ...5000,0	MHz	20,0	26,0	—	dB
	5000,0 ...6000,0	MHz	8,0	10,0	—	dB



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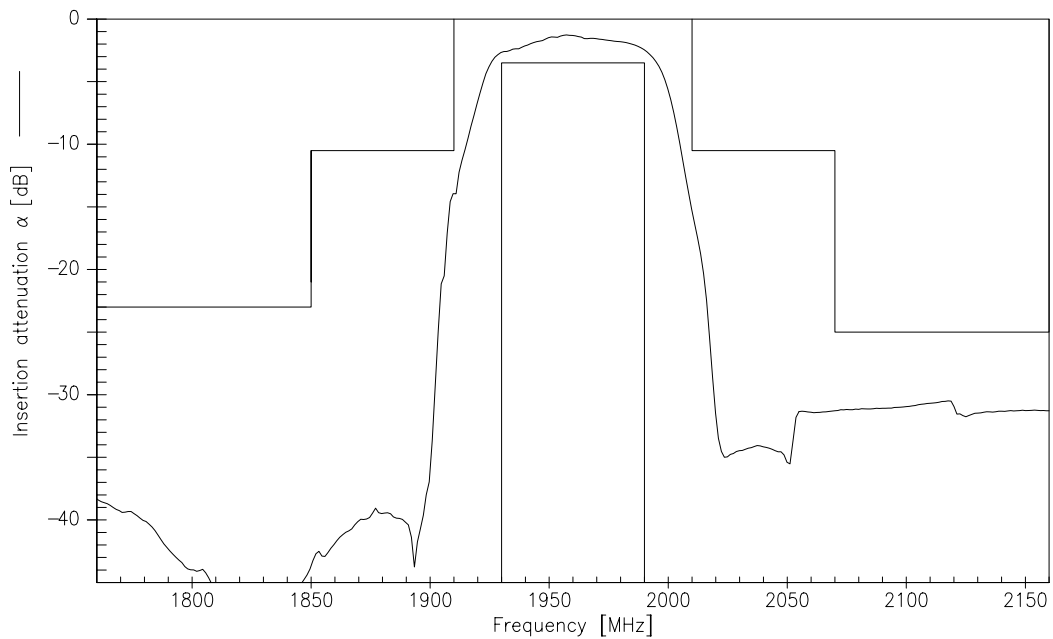
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1960,0 MHz

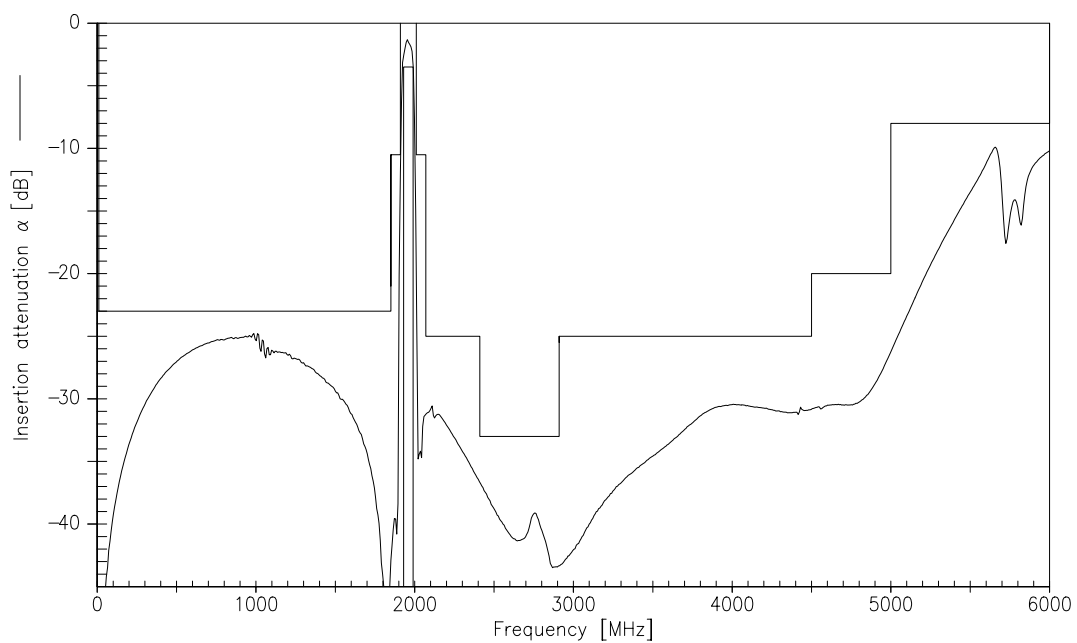
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Transfer function(Spec for 25°C):



Transfer function(wideband):





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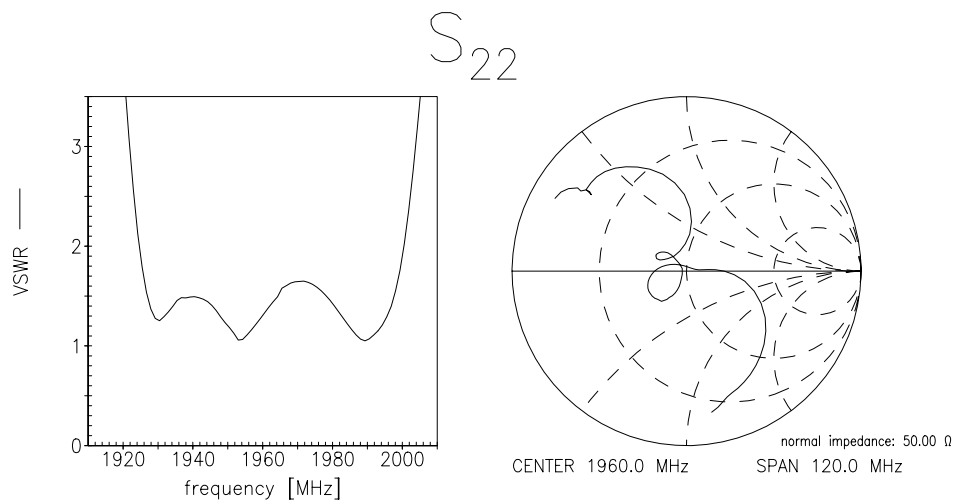
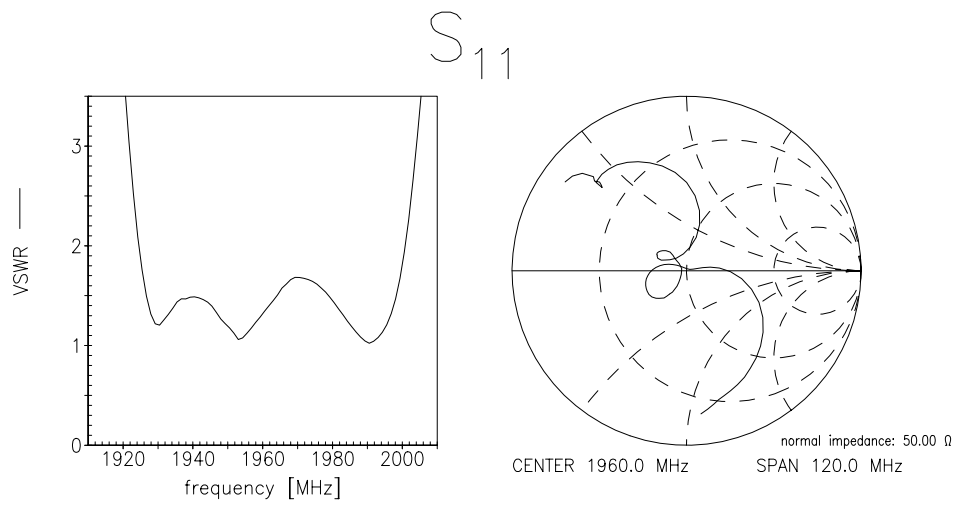
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Reflection functions:





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Low-Loss Filter for Mobile Communication	1960,0 MHz
Data Sheet	SMD

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