



SAW Components

Data Sheet B4161

Data Sheet

An abstract, grayscale background graphic featuring a globe with a grid of latitude and longitude lines. Overlaid on the globe is a large, stylized, 3D-effect word "EPCOS" in a light gray color. The word is tilted and appears to be floating or emerging from the globe. The overall image has a soft, ethereal quality with some light flares and a dark, textured background.

EPCOS



SAW Components

B4161

Low-Loss Filter for Mobile Communication

860,50 MHz

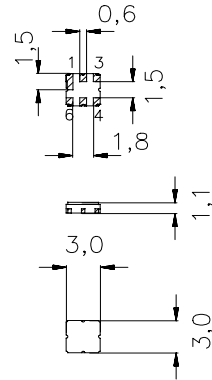
Data Sheet



Features

- Low-loss RF filter for iDEN mobile telephone, receive path
- Low insertion attenuation
- Low amplitude ripple
- No matching network required for operation at 50 Ω
- Ceramic Package for Surface Mounted Technology (SMT)
- RoHS compliant

Ceramic package DCC6C



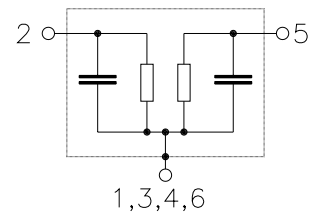
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4161	B39861-B4161-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40 / + 85	$^{\circ}\text{C}$	Machine Model, 10 pulses source impedance 50 Ω continuous wave
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}^*	100*	V	
Input power max.	P_{IN}	0	dBm	

*-acc. to JESD22-A115A(Machine Model), 10 negative & 10 positive pulses



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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	—	860,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
851,000 ... 870,000 MHz		—	2,3	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,000 ... 870,000 MHz		—	0,7	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,000 ... 870,000 MHz		—	37	50	ns
Attenuation	$\alpha_{\min}$				
0,000 ... 795,000 MHz		45	61	—	dB
795,000 ... 806,000 MHz		40	49	—	dB
806,000 ... 825,000 MHz		37	56	—	dB
896,000 ... 902,000 MHz		28	35	—	dB
905,825 ... 924,825 MHz		27	39	—	dB
960,650 ... 979,650 MHz		37	53	—	dB
1070,300 ... 1089,300 MHz		47	51	—	dB
1089,300 ... 3000,000 MHz		27	36	—	dB
Input and output return loss					
851,000 ... 870,000 MHz		11	12	—	dB



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Characteristics

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

		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,4	3,0	dB
	851,000 ... 870,000 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,0	dB
	851,000 ... 870,000 MHz				
Group delay ripple (p-p)	$\Delta\tau$	—	39	60	ns
	851,000 ... 870,000 MHz				
Attenuation	$\alpha_{\min}$				
	0,000 ... 795,000 MHz	45	59	—	dB
	795,000 ... 806,000 MHz	40	49	—	dB
	806,000 ... 825,000 MHz	37	50	—	dB
	896,000 ... 902,000 MHz	28	34	—	dB
	905,825 ... 924,825 MHz	27	39	—	dB
	960,650 ... 979,650 MHz	37	53	—	dB
	1070,300 ... 1089,300 MHz	47	51	—	dB
	1089,300 ... 3000,000 MHz	27	36	—	dB
Input and output return loss					
	851,000 ... 870,000 MHz	11	12	—	dB



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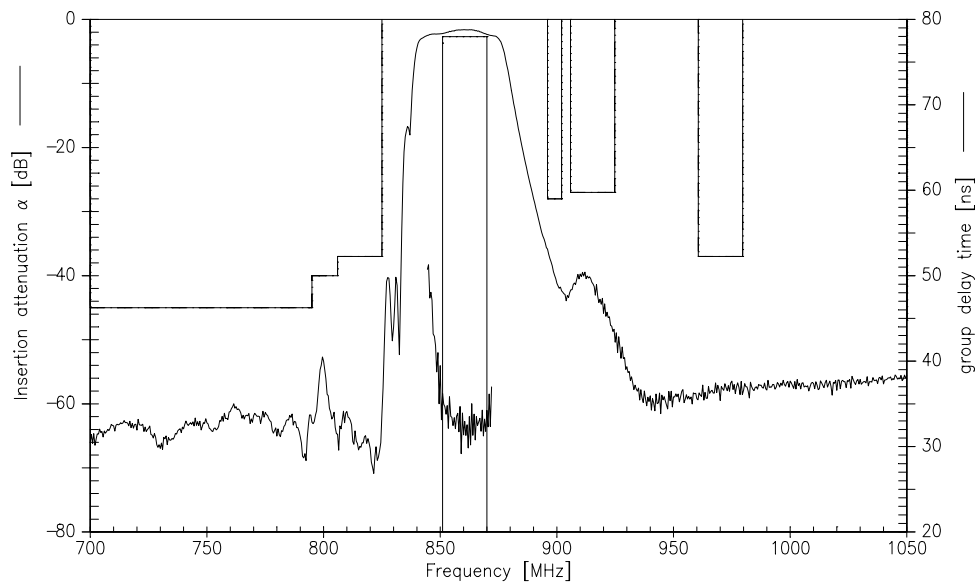
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860,50 MHz

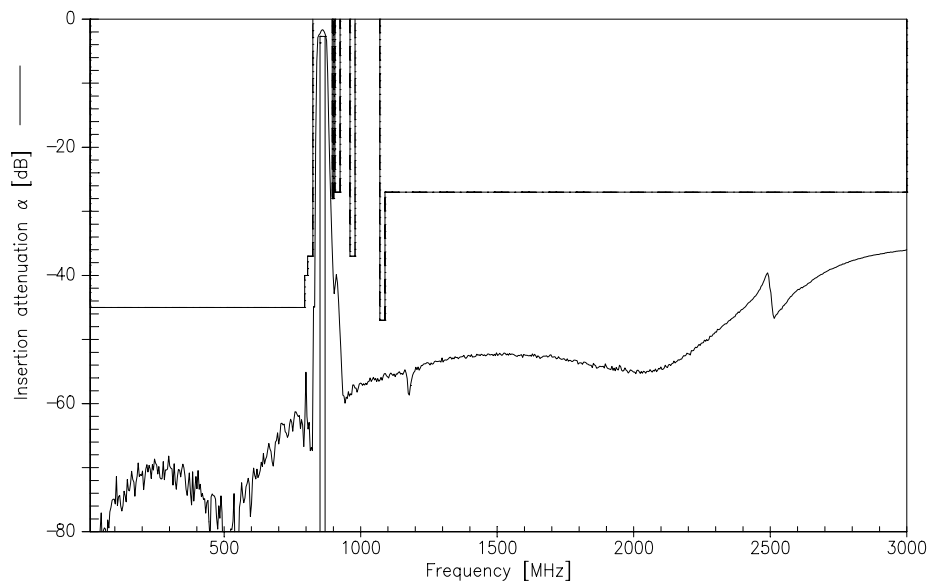
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Transfer function (25 ± 2 °C)



Transfer function (wideband)





SAW Components	B4161
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Data Sheet	SMD

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