EPCOS

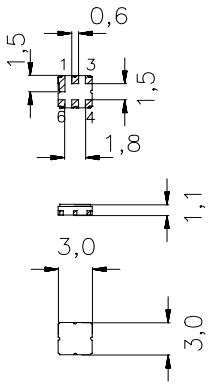
SAW Components

Data Sheet B4161

Features

Ceramic package **DCC6C**

- 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 **S**urface **M**ounted **T**echnology (**SMT**)
- RoHS compliant



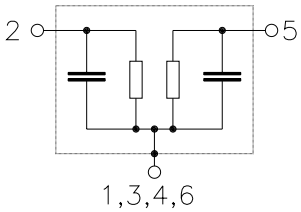
Terminals

- 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 **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

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

Characteristics

Operating temperature range: T = 25 ± 2°C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

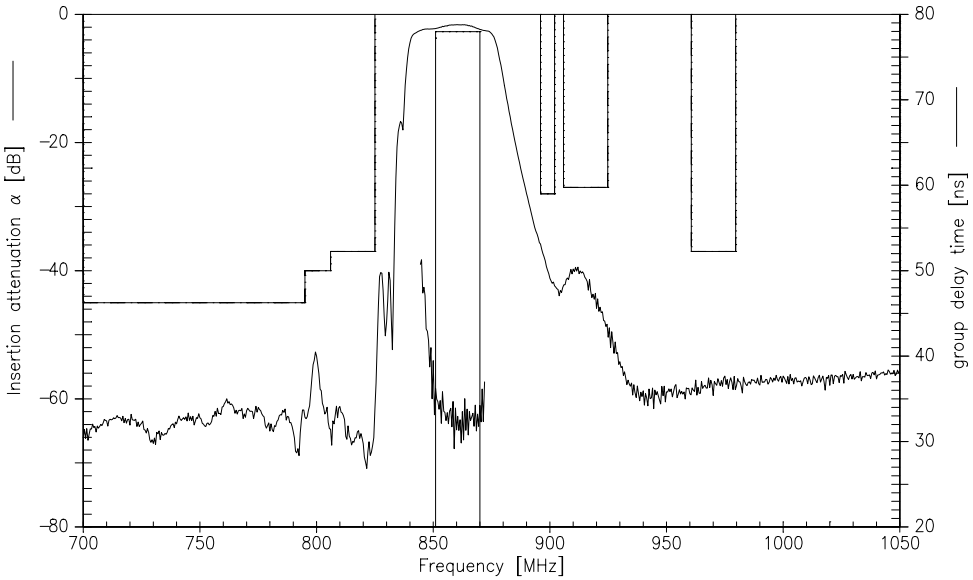
		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	α_{max}				
851,000 ... 870,000 MHz		—	2,3	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,000 ... 870,000 MHz		—	0,7	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,000 ... 870,000 MHz		—	37	50	ns
Attenuation	α_{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

Characteristics

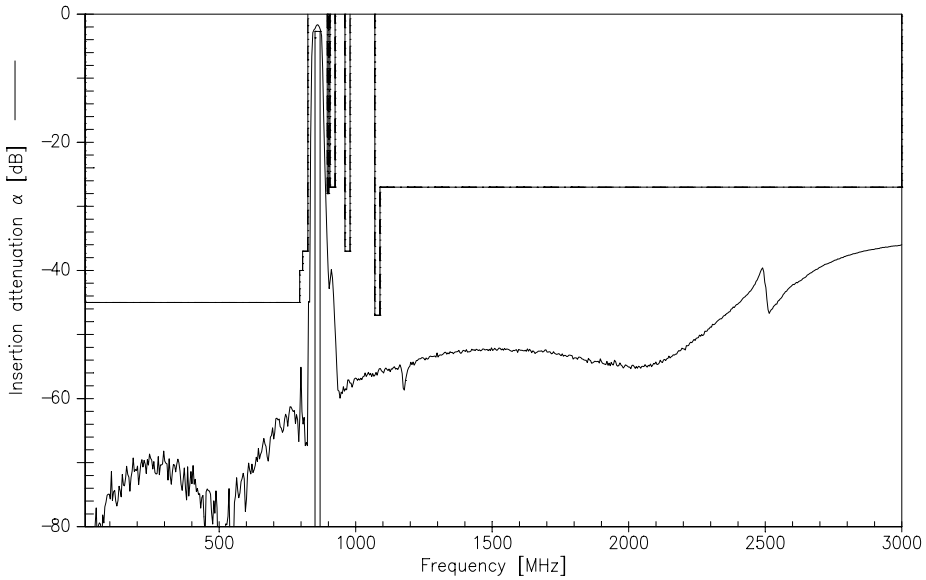
Operating temperature range: T = -30 to +85˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	α_{max}				
851,000 ... 870,000 MHz		—	2,4	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,000 ... 870,000 MHz		—	0,8	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,000 ... 870,000 MHz		—	39	60	ns
Attenuation	α_{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

Transfer function (25±2 ˚C)



Transfer function (wideband)



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

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This brochure replaces the previous edition.

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