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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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SAW Components
Low-Loss Duplexer for Mobile Communication

B4005
959.5 MHz
914.5 MHz

Data Sheet

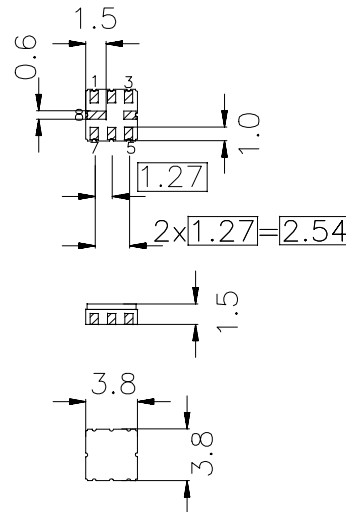
Ceramic package **QCC 8B**

Features

- Compact RF duplexer for cordless telephone CT1
- No matching network required for operation at 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

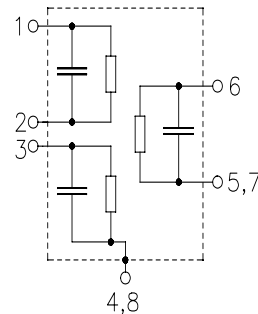
- Ni , gold-plated



Dimensions in mm, approx. weight 0.07 g

Pin configuration

- 6 Ant
- 3 Port 1
- 1 Port 2
- 5, 7 Ant - ground
- 2 Port 2 - ground
- 4,8 Case / Port 1 - ground



Type	Ordering code	Marking and Package according to	Packing according to
B4005	B39961-B4005-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	0 /+ 60	°C
Storage temperature range	T_{stg}	- 40/+ 85	°C
DC voltage	V_{DC}	3	V
Input power	P_{IN}	17	dBm



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Characteristics channel 1 (Port 1 - Ant)

Operable temperature range: $T_A = 0$ to $+60$ °C

Ant term. impedance $Z_{Ant} = 50 \Omega$

Port 1 term. impedance $Z_{Port 1} = 50 \Omega$

Port 2 term. impedance $Z_{Port 2} = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	959.5	—	MHz
Maximum insertion attenuation	α_{max}	—	3.3	4.0	dB
959.00 ... 960.00 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.7	2.0	dB
959.00 ... 960.00 MHz					
Absolute attenuation	α				dB
50.00 ... 850.00 MHz		50	54	—	
850.00 ... 917.20 MHz		37	40	—	
917.20 ... 938.60 MHz		34	37	—	
938.60 ... 949.30 MHz		8	15	—	
969.70 ... 970.70 MHz		10	25	—	
970.70 ... 980.40 MHz		17	27	—	
980.40 ... 981.40 MHz		32	40	—	
981.40 ... 1001.80 MHz		26	30	—	
1001.80 ... 1002.80 MHz		30	33	—	
1015.00 ... 1350.00 MHz		40	45	—	
1350.00 ... 1850.00 MHz		32	36	—	
1850.00 ... 2000.00 MHz		28	31	—	



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Characteristics channel 2 (Port 2 - Ant)

Operable temperature range: $T_A = 0$ to $+60$ °C

Ant term. impedance $Z_{Ant} = 50 \Omega$

Port 1 term. impedance $Z_{Port 1} = 50 \Omega$

Port 2 term. impedance $Z_{Port 2} = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	914.5	—	MHz
Maximum insertion attenuation	α_{max}	—	3.0	4.0	dB
	914.00 ... 915.00 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.7	2.0	dB
	914.00 ... 915.00 MHz				
Absolute attenuation	α				
	50.00 ... 850.00 MHz	52	57	—	dB
	850.00 ... 872.20 MHz	45	53	—	dB
	872.20 ... 893.60 MHz	28	35	—	dB
	893.60 ... 904.30 MHz	6	18	—	dB
	924.70 ... 925.70 MHz	12	27	—	dB
	925.70 ... 935.40 MHz	20	29	—	dB
	935.40 ... 936.40 MHz	32	38	—	dB
	936.40 ... 956.80 MHz	26	30	—	dB
	956.80 ... 959.00 MHz	32	38	—	dB
	959.00 ... 1000.00 MHz	37	44	—	dB
	1000.00 ... 1350.00 MHz	44	47	—	dB
	1350.00 ... 1850.00 MHz	25	28	—	dB
	1850.00 ... 2000.00 MHz	18	25	—	dB

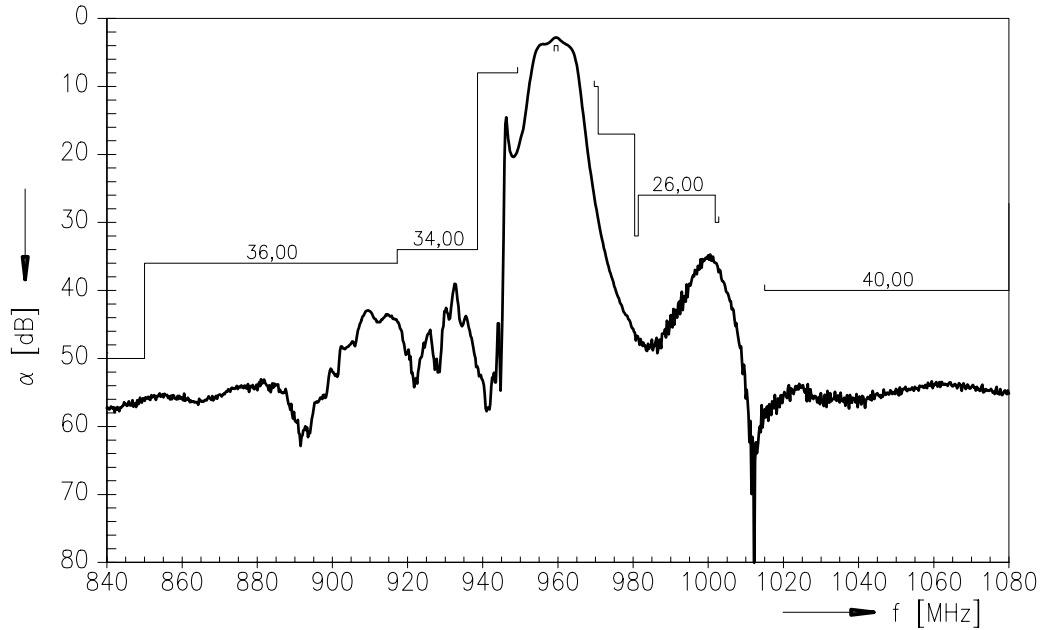


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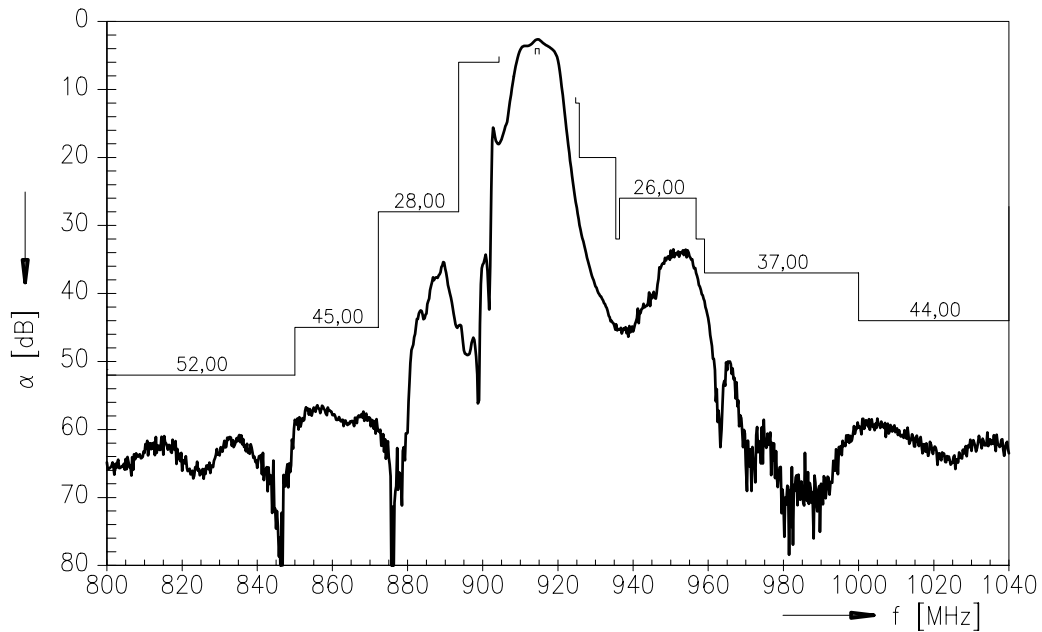
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Data Sheet

Frequency response channel 1 :



Frequency response channel 2 :



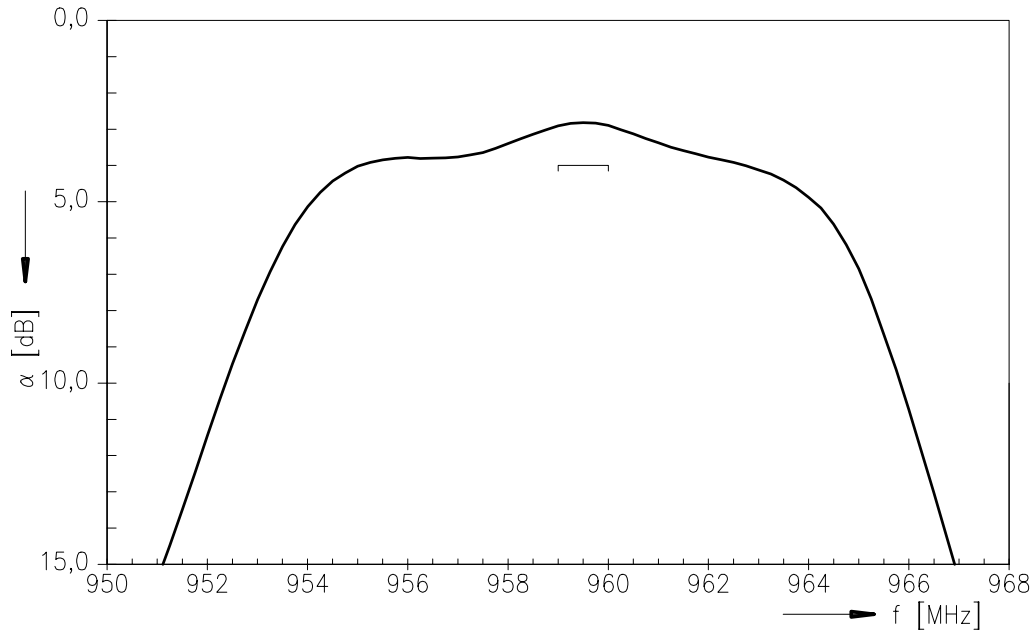


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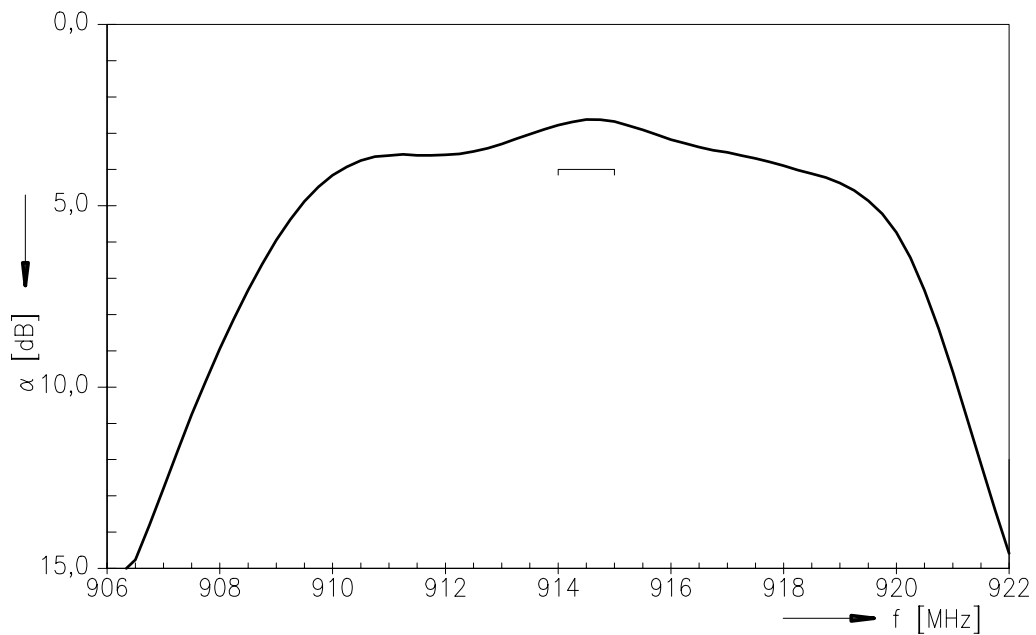
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Data Sheet

Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)



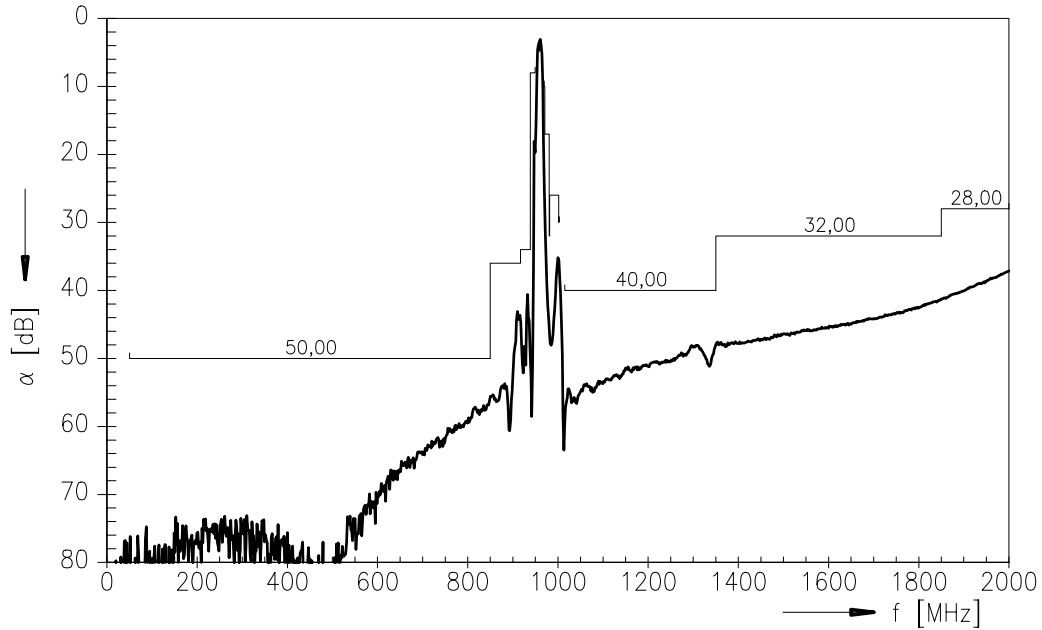


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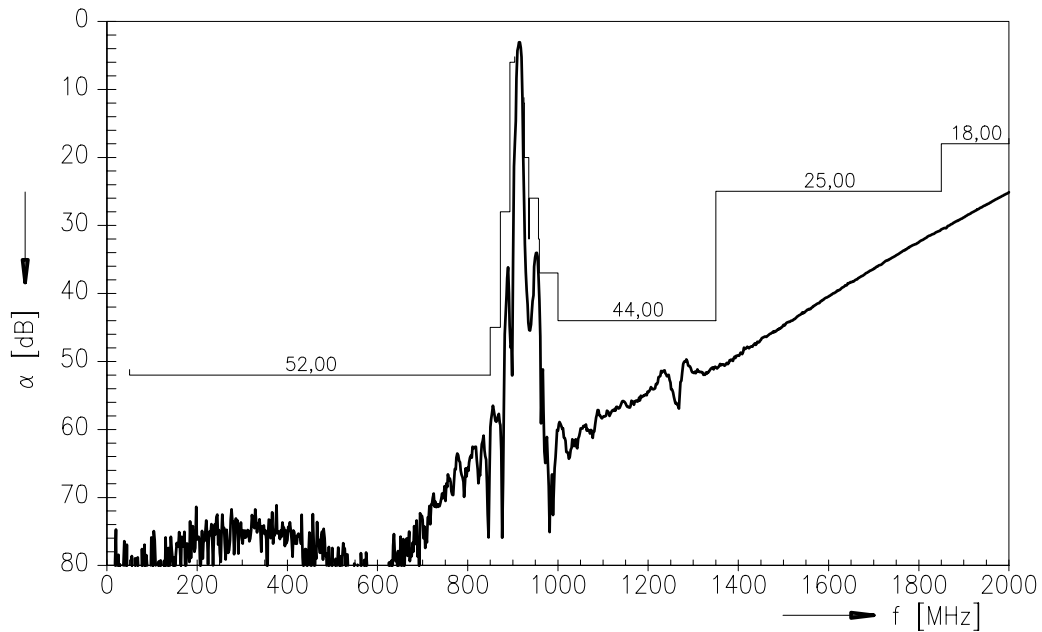
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Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)





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Isolation between channel 1 and channel 2

Operating temperature range $T = 0 \text{ to } +60 \text{ }^\circ\text{C}$
 Ant term. impedance $Z_{\text{Ant}} = 50 \text{ } \Omega$
 Port 1 term. impedance $Z_{\text{Port 1}} = 50 \text{ } \Omega$
 Port 2 term. impedance $Z_{\text{Port 2}} = 50 \text{ } \Omega$

		min.	typ.	max.	
Absolute attenuation	α				
	959,00 ... 960,00 MHz	36	41	—	dB
	914,00 ... 915,00 MHz	36	41	—	dB

Isolation between channel 1 and channel 2 :

