EPCOS

SAW Components

Data Sheet B4054

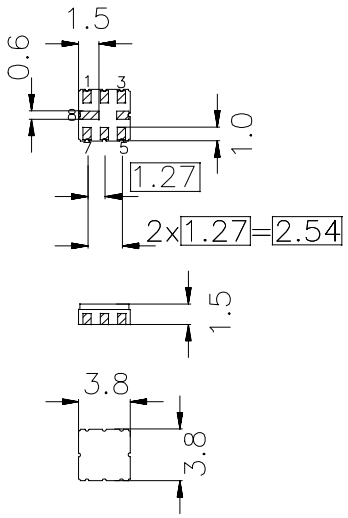
Ceramic package **QCC8B**

Features

- Compact RF duplexer for cordless telephone ISM
- No matching network required for operation at 50 Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

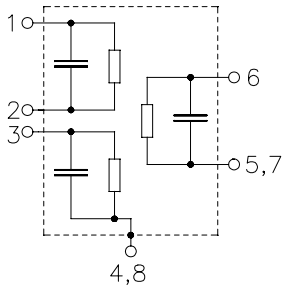
- Ni , gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4054	B39921-B4054-Z810	C61157-A7-A46	F61074-V8037-Z000

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

Maximum ratings

Operable temperature range	T	– 10/+ 55	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	5	V	
Input power	P_{IN}	5	dBm	

Characteristics channel 1 (Port 1 - Ant)

Operable temperature range T_A = –10 to 55 °C
Ant term. impedance Z_{Ant} = 50 Ω
Port 1 term. impedance $Z_{Port\ 1}$ = 50 Ω
Port 2 term. impedance $Z_{Port\ 2}$ = 50 Ω

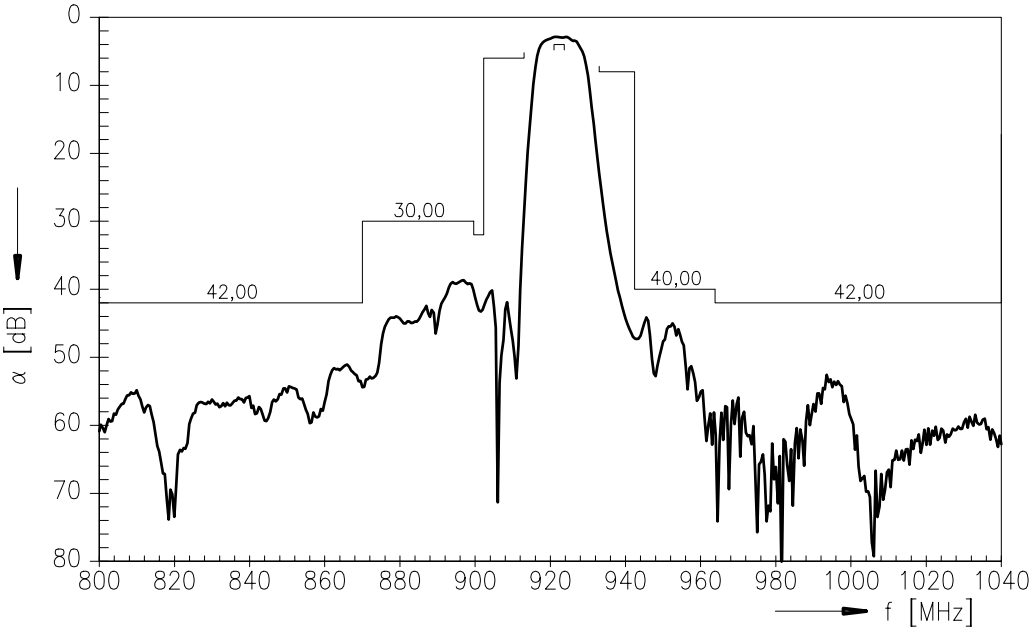
		min.	typ.	max.	
Center frequency	f_c	—	922,35	—	MHz
Maximum insertion attenuation	α_{max}				
921,00 ... 923,70 MHz		—	3,2	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
921,00 ... 923,70 MHz		—	0,3	1,5	dB
Absolute attenuation	α				
450,00 ... 870,00 MHz		42	49	—	dB
870,00 ... 899.60 MHz		30	39	—	dB
899,60 ... 902,30 MHz		32	39	—	dB
902,30 ... 913,00 MHz		6	30	—	dB
933,00 ... 942,40 MHz		8	22	—	dB
942,40 ... 963,80 MHz		40	44	—	dB
963,80 ... 1200,00 MHz		42	48	—	dB
1200,00 ... 1800,00 MHz		18	23	—	dB

Characteristics channel 2 (Port 2 - Ant)

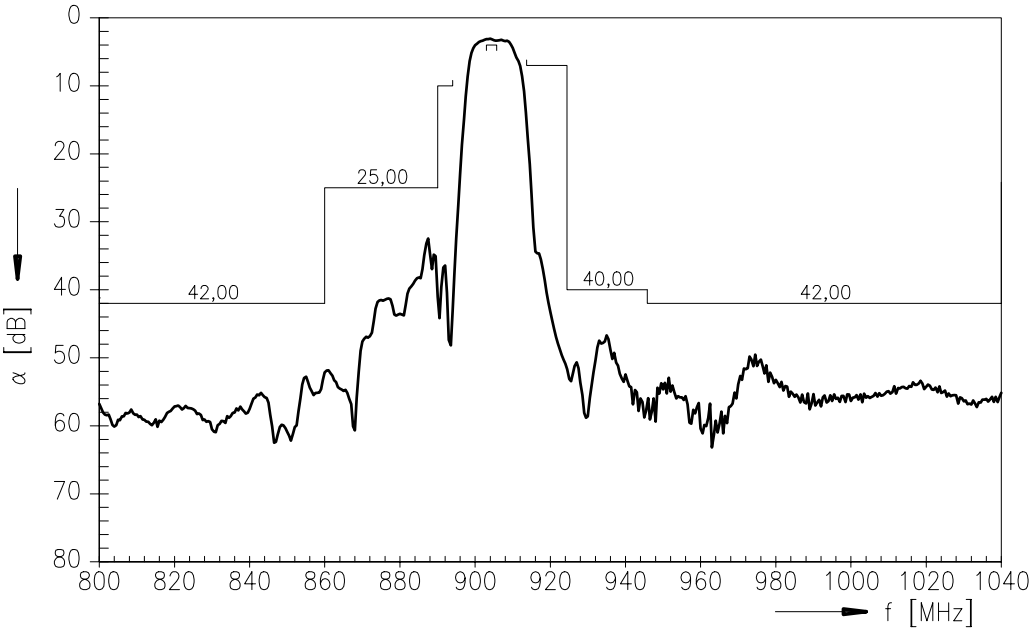
Operable temperature range T_A = –10 to 55 °C
Ant term. impedance Z_{Ant} = 50 Ω
Port 1 term. impedance $Z_{Port\ 1}$ = 50 Ω
Port 2 term. impedance $Z_{Port\ 2}$ = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	904,35	—	MHz
Maximum insertion attenuation	α_{max}				
903,00 ... 905,70 MHz		—	3,3	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
903,00 ... 905,70 MHz		—	0,3	1,5	dB
Absolute attenuation	α				
450,00 ... 860,00 MHz		42	52	—	dB
860,00 ... 890,00 MHz		25	32	—	dB
890,00 ... 894,00 MHz		10	30	—	dB
913,70 ... 924,40 MHz		7	15	—	dB
924,40 ... 945,80 MHz		40	47	—	dB
945,80 ... 1200,00 MHz		42	49	—	dB
1200,00 ... 1800,00 MHz		25	32	—	dB

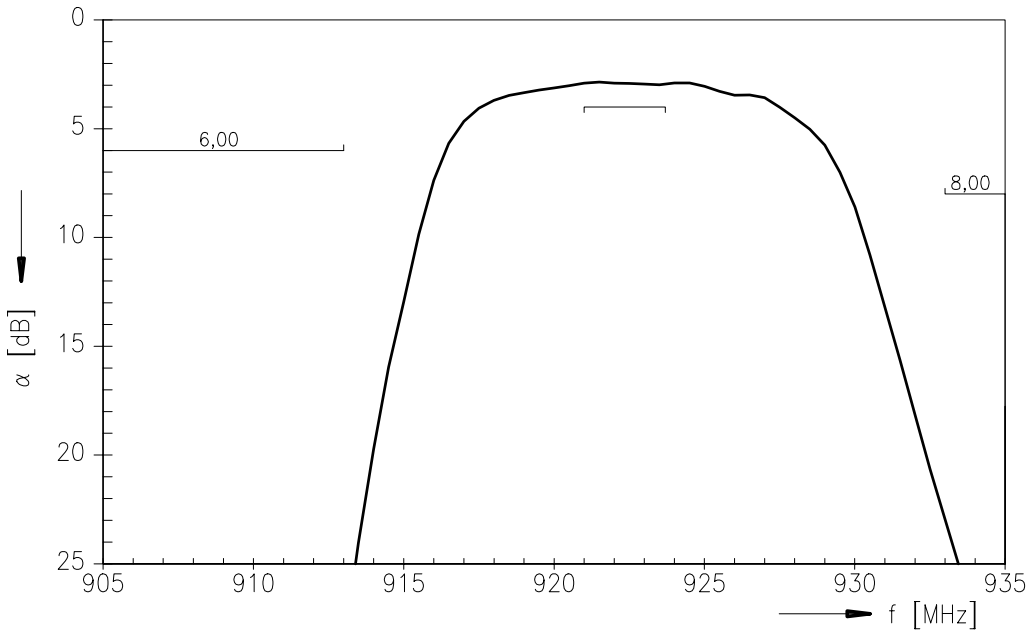
Frequency response channel 1 :



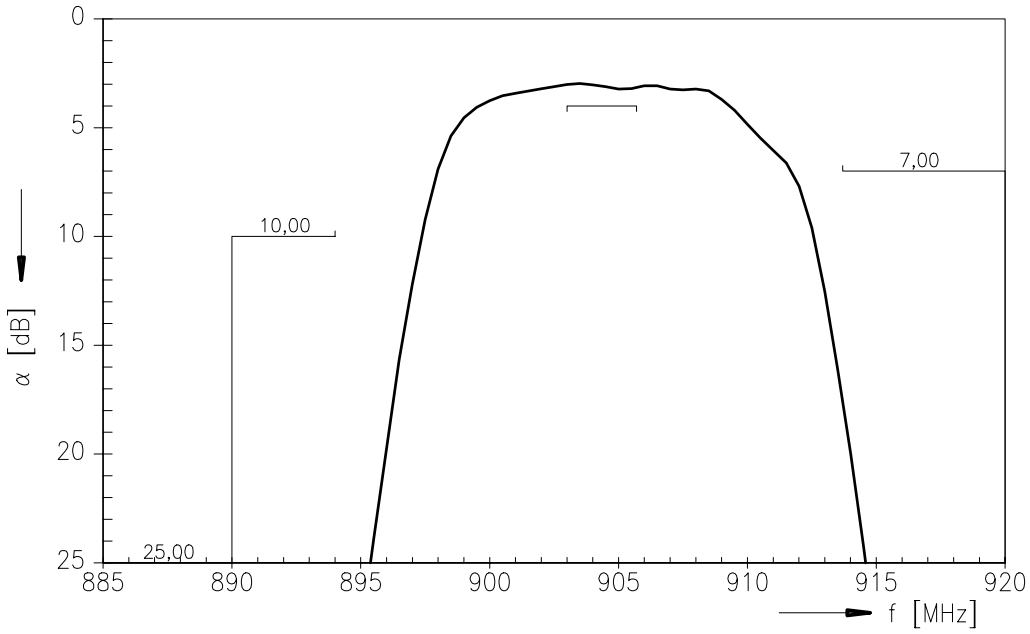
Frequency response channel 2 :



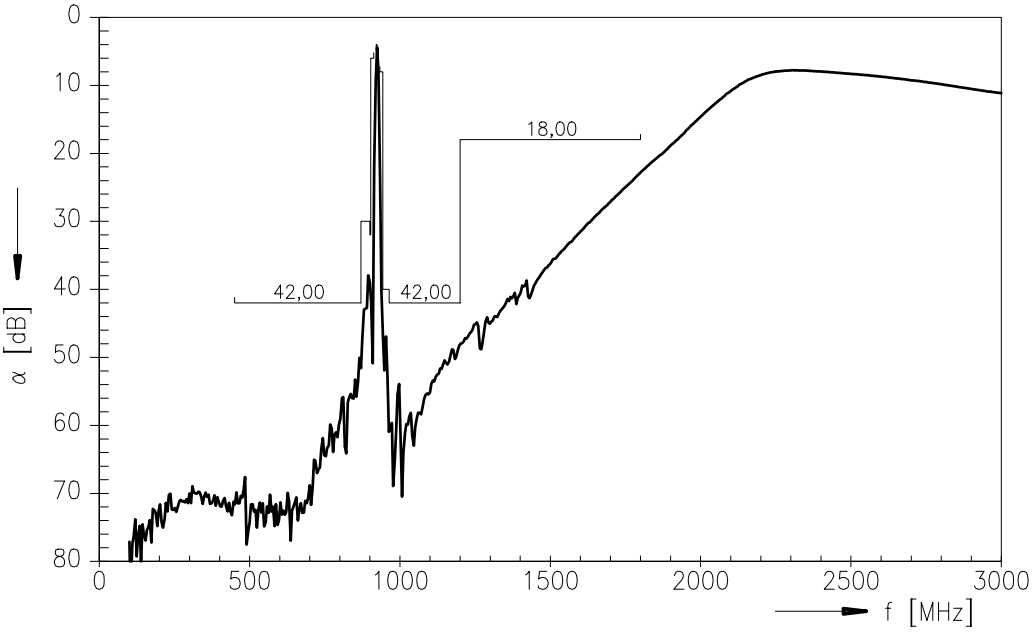
Frequency response channel 1 : (passband)



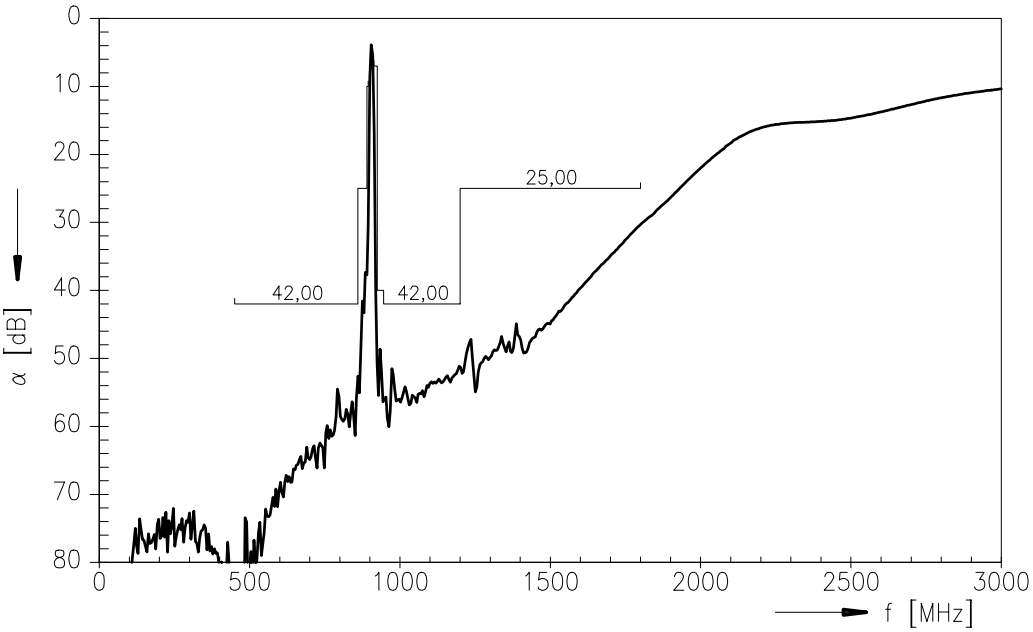
Frequency response channel 2 : (passband)



Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)

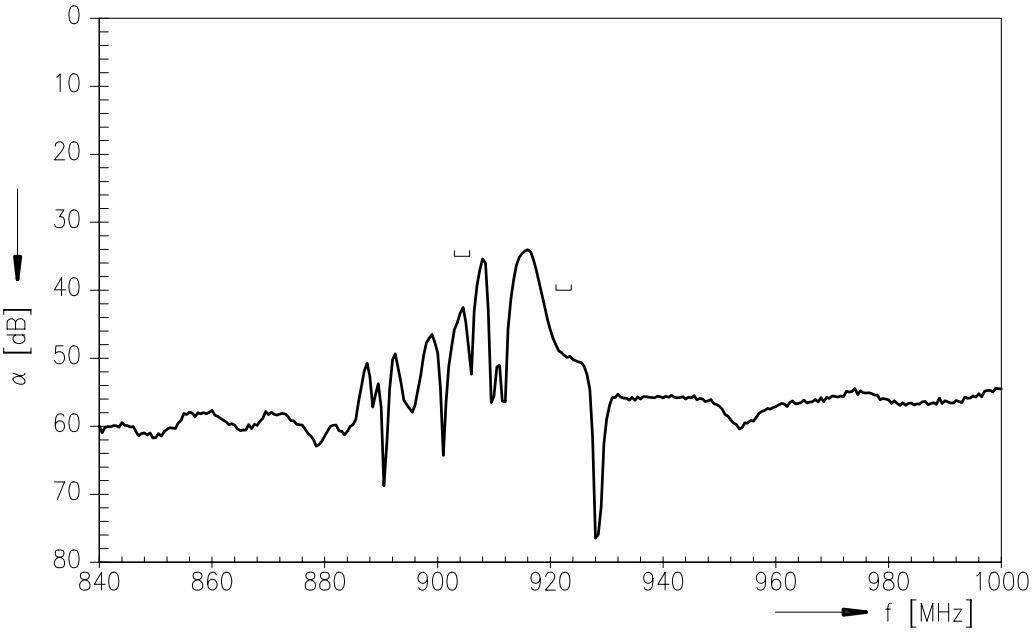


Isolation between channel 1 and channel 2

Operating temperature range	T	= –10 to +55 ˚C
Ant term. impedance	Z_{Ant}	= 50 Ω
Port 1 term. impedance	$Z_{Port\ 1}$	= 50 Ω
Port 2 term. impedance	$Z_{Port\ 2}$	= 50 Ω

		min.	typ.	max.	
Absolute attenuation	α				
	921,00 ... 923,70 MHz	40	48	—	dB
	903,00 ... 905,70 MHz	35	42	—	dB

Isolation between channel 1 and channel 2 :



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