Siemens Matsushita Components

SAW Components
Low-Loss Duplexer for Mobile Communication

B4040
926,25 MHz
903,75 MHz

Data Sheet

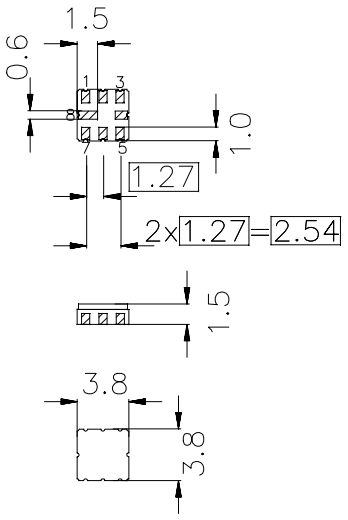
Ceramic package **QCC8B**

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

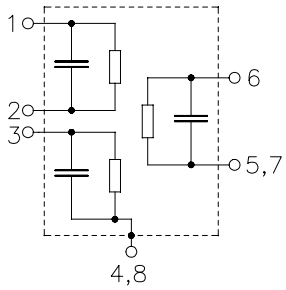
- Ni , gold-plated



Dimensions in mm, approx. weight 0,07 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
B4040	B39931-B4040-Z810	C61157-A7-A46	F61074-V8037-Z000

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

Maximum ratings

Operable temperature range	T	0 /+ 55	˚C
Storage temperature range	T_{stg}	– 40/+ 85	˚C
DC voltage	V_{DC}	0	V
Input power	P_{IN}	5	dBm

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Characteristics channel 1 (Port 1 - Ant)

Operable temperature range T_A = 0 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	—	926,25	—	MHz
Maximum insertion attenuation	α_{max}				
924,90 ... 928,15 MHz		—	3,5	4,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
924,90 ... 928,15 MHz		—	0,5	2,0	dB
Absolute attenuation	α				
450,00 ... 850,00 MHz		48	53	—	dB
850,00 ... 884,80 MHz		41	45	—	dB
884,80 ... 910,00 MHz		34	36	—	dB
910,00 ... 916,90 MHz		8	20	—	dB
935,00 ... 946,30 MHz		5	20	—	dB
946,30 ... 949,00 MHz		48	53	—	dB
967,70 ... 980,00 MHz		48	55	—	dB
980,00 ... 1350,00 MHz		40	44	—	dB
1350,00 ... 1800,00 MHz		21	26	—	dB

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Characteristics channel 2 (Port 2 - Ant)

Operable temperature range T_A = 0 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	—	903,75	—	MHz
Maximum insertion attenuation	α_{max}				
901,45 ... 905,10 MHz		—	2,8	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
901,45 ... 905,10 MHz		—	0,4	2,0	dB
Absolute attenuation	α				
450,00 ... 859,60 MHz		49	54	—	dB
859,60 ... 862,30 MHz		47	51	—	dB
862,30 ... 883,70 MHz		28	36	—	dB
883,70 ... 894,40 MHz		5	9	—	dB
913,15 ... 923,80 MHz		5	11	—	dB
923,80 ... 927,60 MHz		38	49	—	dB
945,20 ... 970,00 MHz		22	33	—	dB
970,00 ... 1050,00 MHz		48	54	—	dB
1050,00 ... 1350,00 MHz		40	49	—	dB
1350,00 ... 1800,00 MHz		25	39	—	dB

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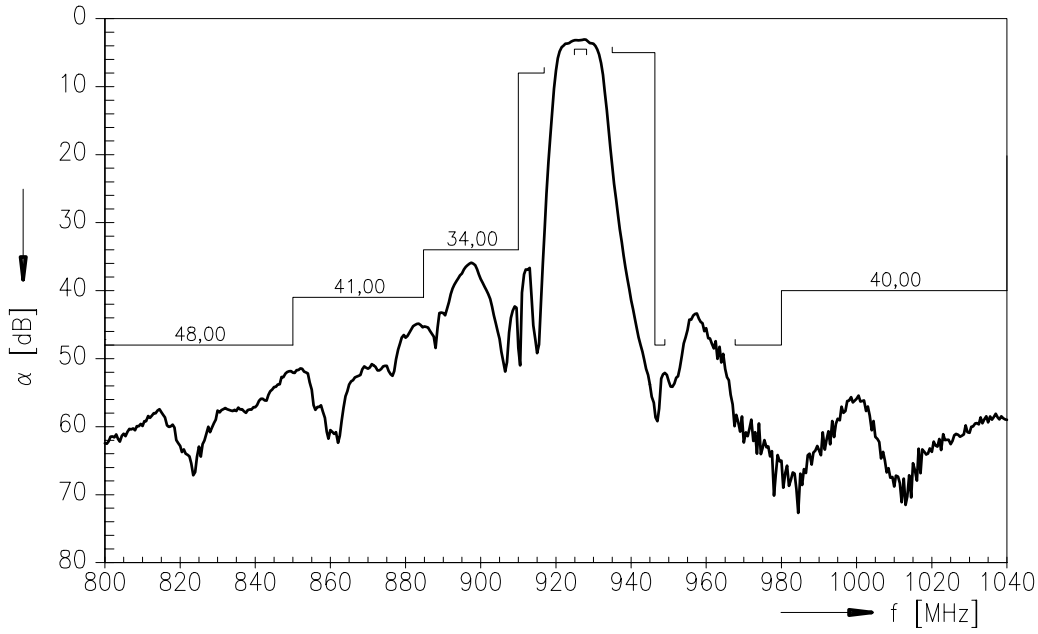
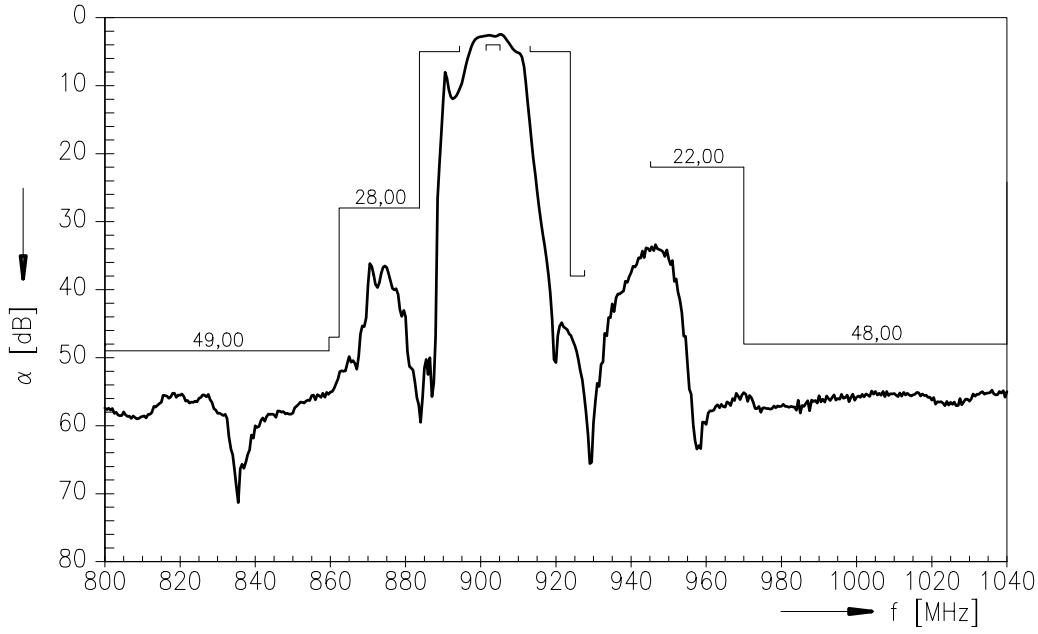
Frequency response channel 1 :

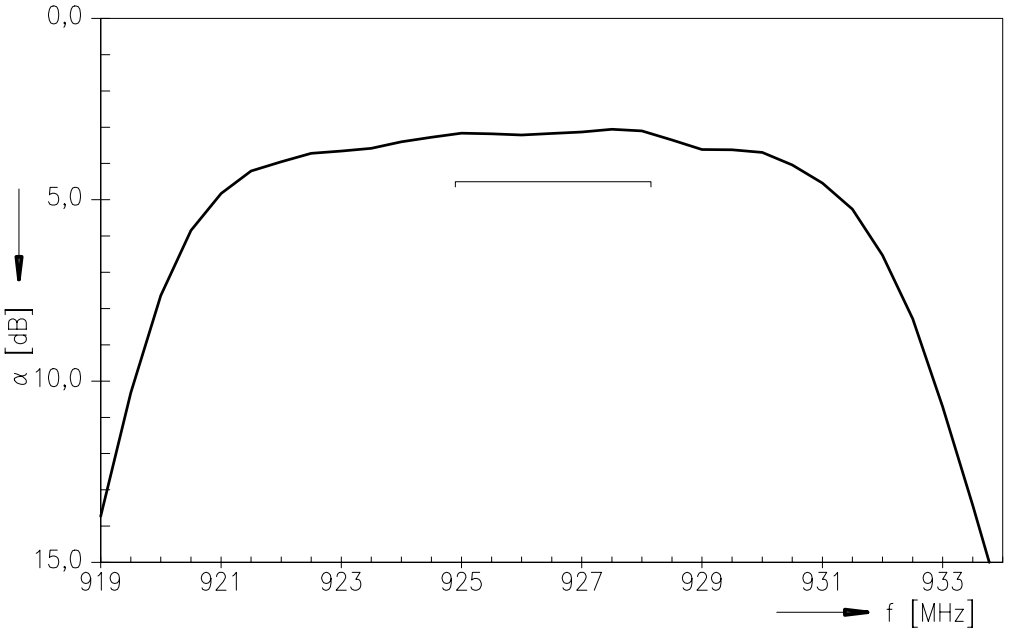


Frequency response channel 2 :

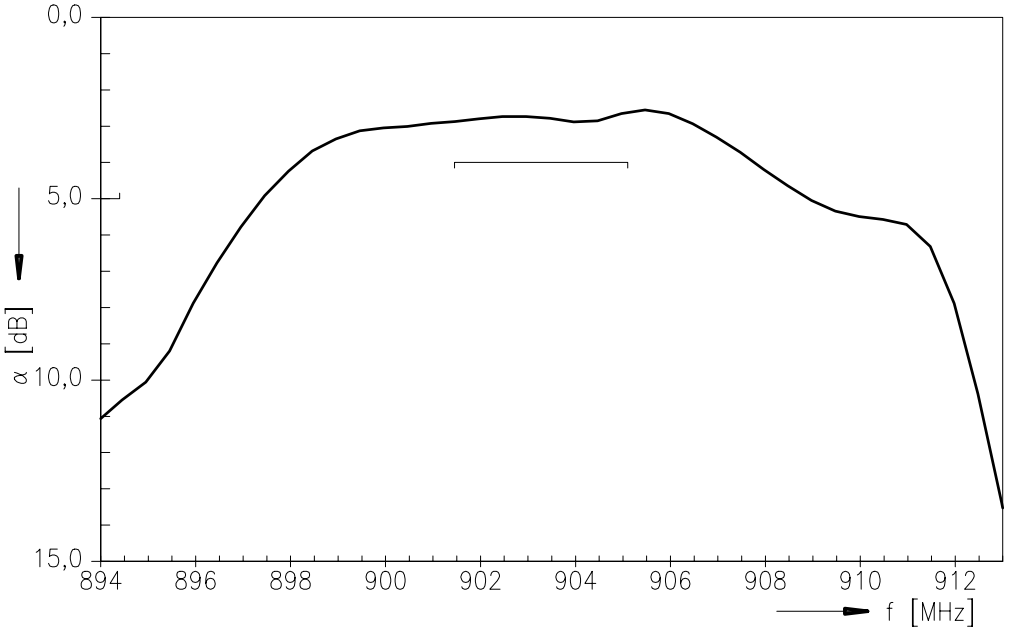


Data Sheet

Frequency response channel 1 : (passband)

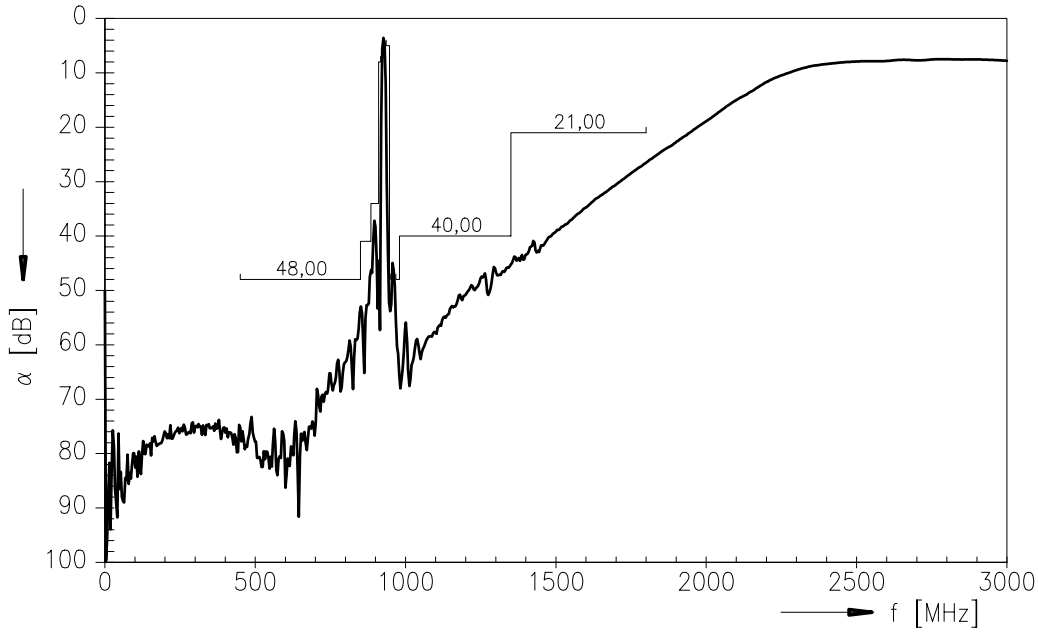


Frequency response channel 2 : (passband)

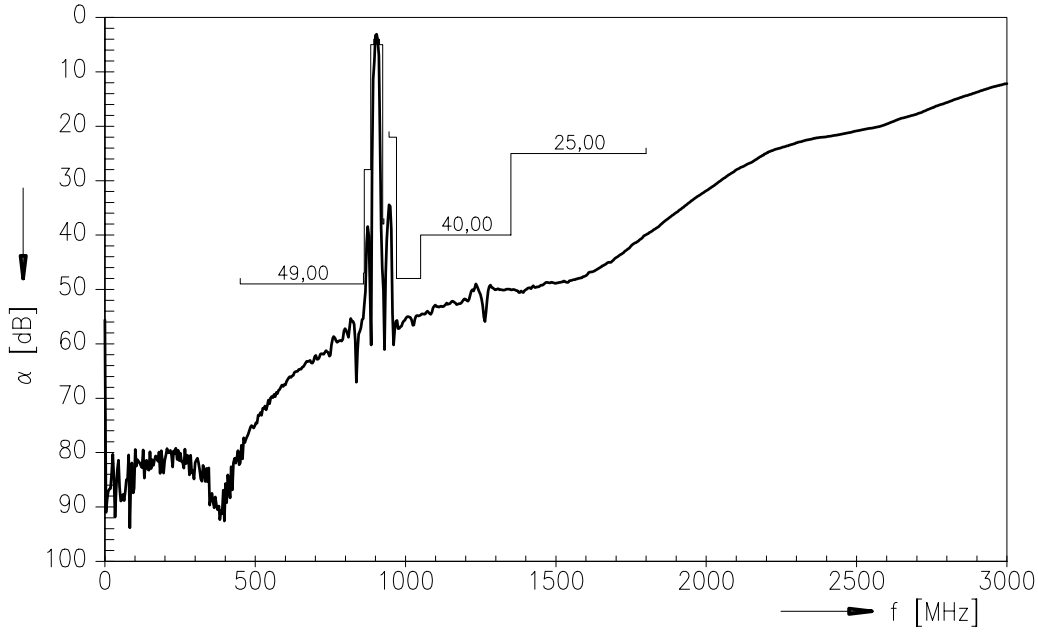


Data Sheet

Frequency response channel 1 : (wideband)



Frequency response channel 1 : (wideband)



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Isolation between channel 1 and channel 2

Operating temperature range	T	=	0 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				
924,90 ... 928,15 MHz		37	47	—	dB
901,45 ... 905,10 MHz		37	43	—	dB

Isolation between channel 1 and channel 2 :