



Siemens Matsushita Components

SAW Components
Low-Loss Duplexer for Mobile Communication

B4040
926,25 MHz
903,75 MHz

Data Sheet

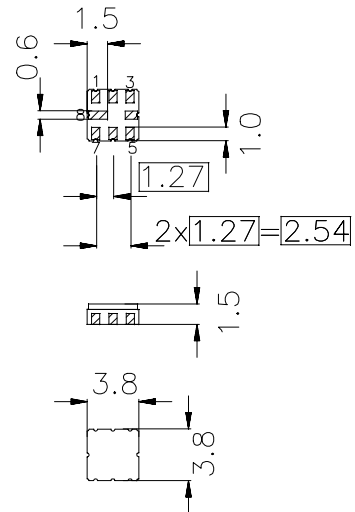
Features

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

Terminals

- Ni , gold-plated

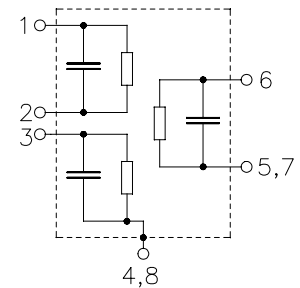
Ceramic package **QCC8B**



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 Sensitive Device (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 $T_A = 0 \text{ to } 55 \text{ }^\circ\text{C}$
 Ant term. impedance $Z_{Ant} = 50 \text{ } \Omega$
 Port 1 term. impedance $Z_{Port 1} = 50 \text{ } \Omega$
 Port 2 term. impedance $Z_{Port 2} = 50 \text{ } \Omega$

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



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Characteristics channel 2 (Port 2 - Ant)

Operable temperature range $T_A = 0 \text{ to } 55 \text{ }^\circ\text{C}$
 Ant term. impedance $Z_{Ant} = 50 \text{ } \Omega$
 Port 1 term. impedance $Z_{Port 1} = 50 \text{ } \Omega$
 Port 2 term. impedance $Z_{Port 2} = 50 \text{ } \Omega$

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

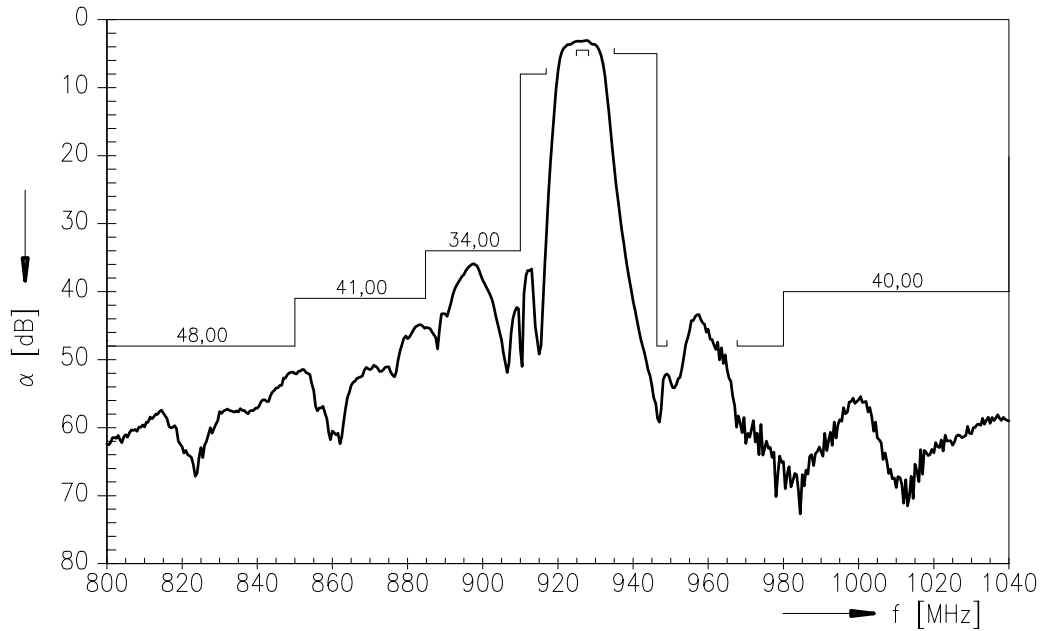


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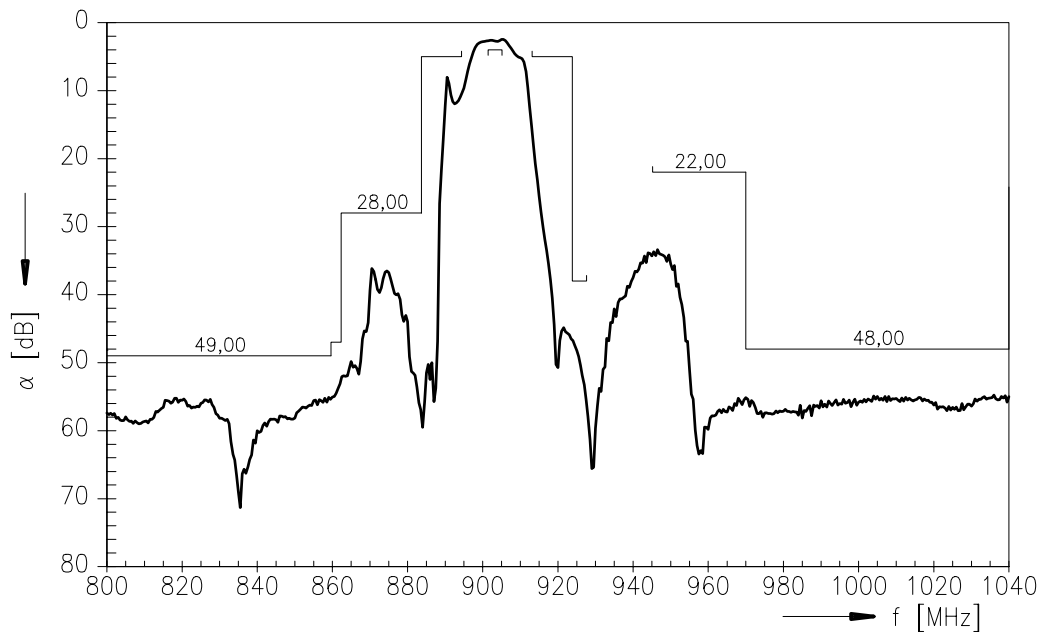
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Frequency response channel 1 :



Frequency response channel 2 :



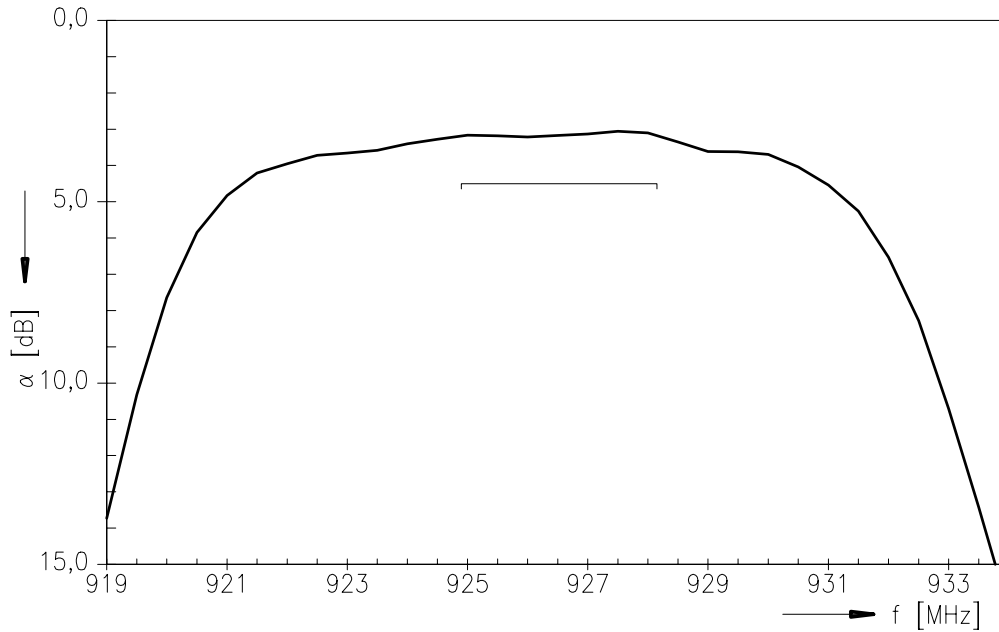


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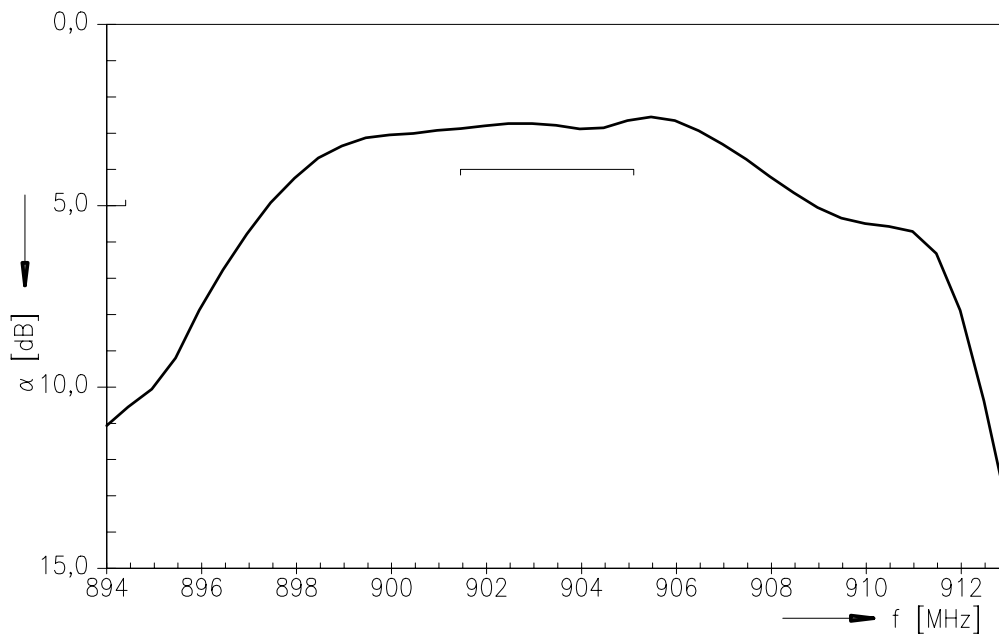
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Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)



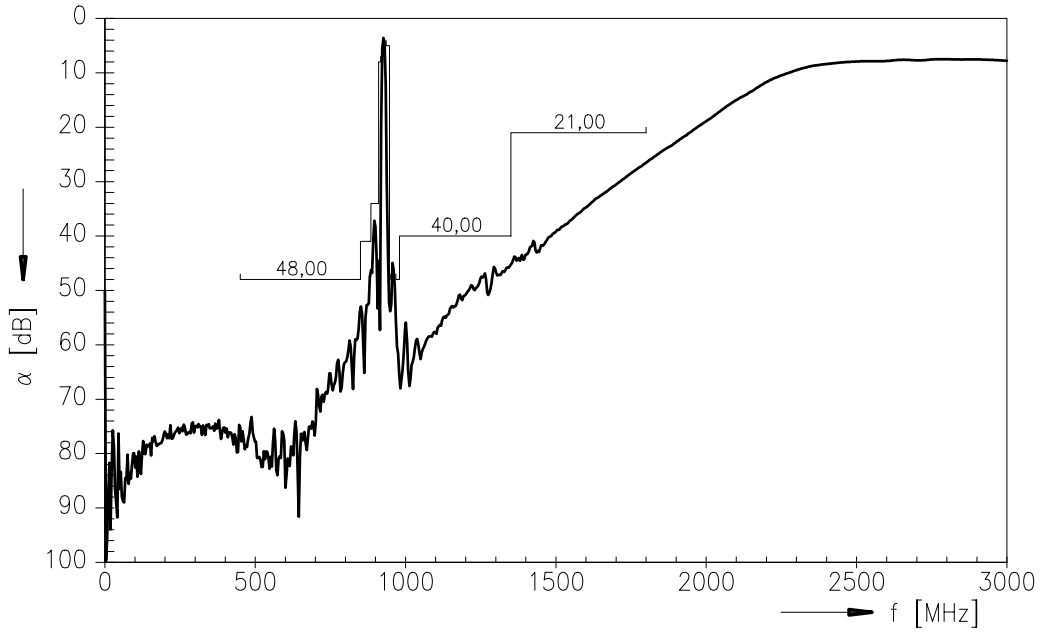


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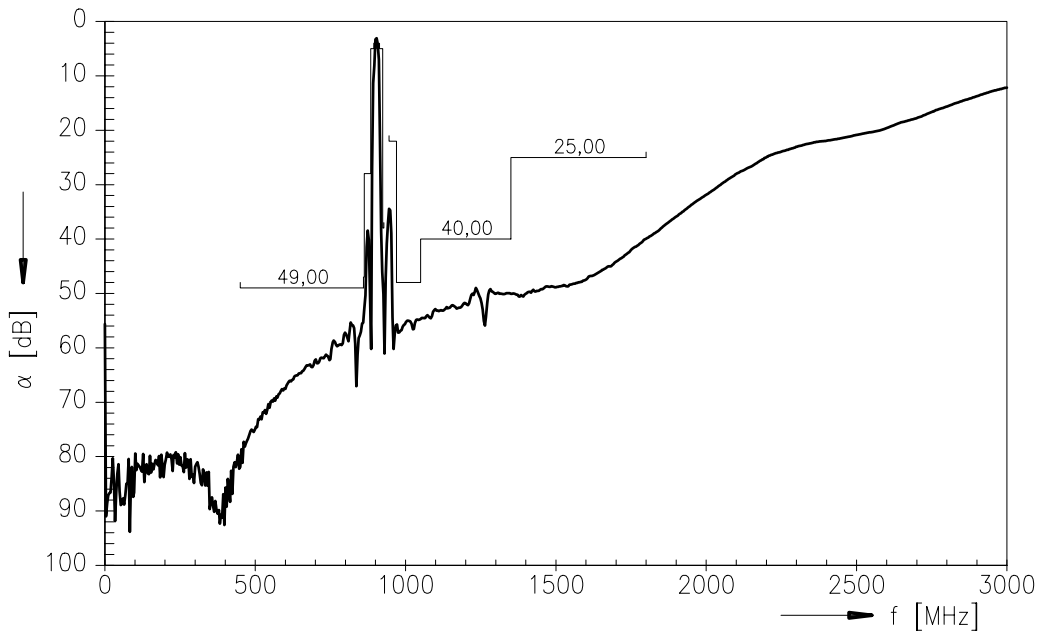
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Frequency response channel 1 : (wideband)



Frequency response channel 1 : (wideband)





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Isolation between channel 1 and channel 2

Operating temperature range $T = 0$ to $+55$ °C
 Ant term. impedance $Z_{Ant} = 50 \Omega$
 Port 1 term. impedance $Z_{Port 1} = 50 \Omega$
 Port 2 term. impedance $Z_{Port 2} = 50 \Omega$

		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 :

