



Siemens Matsushita Components

SAW Components Low-Loss Duplexer for ISM Cordless Phone System

B4043
926,25 MHz
903,65 MHz

Data Sheet

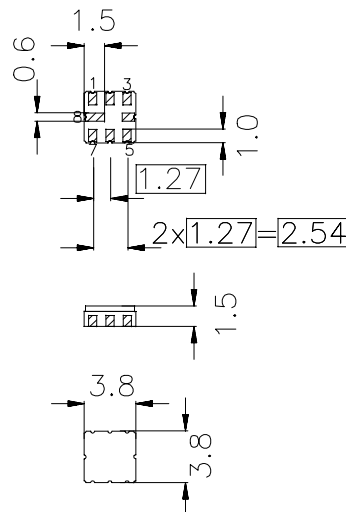
Features

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

Terminals

- Ni , gold-plated

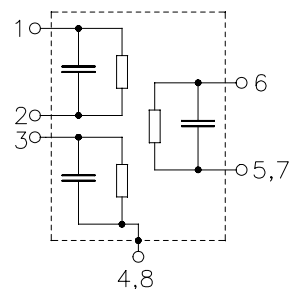
Ceramic package **QCC 8B**



Dimensions in mm, approx. weight 0,07 g

Pin configuration

6	Ant
1	Port 1 (Rx/Tx)
3	Port 2 (Tx/Rx)
5, 7	Ground
2	Ground
4,8	Case / Ground



Type	Ordering code	Marking and Package according to	Packing according to
B4043	B39931-B4043-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	0 /+ 40	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power	P_{IN}	3	dBm	

Preliminary format of data sheet.
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Page 1 of 6

OFW EM CP
Dec 21, 1998



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Characteristics channel 1 (Port 1 - Ant)

Operable temperature range $T = 0$ to 40°C

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

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

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

		min.	typ.	max.	
Center frequency	f_c	—	926,25	—	MHz
Maximum insertion attenuation	α_{max}				
924,75 ... 927,75 MHz		—	2,0	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
924,75 ... 927,75 MHz		—	0,3	1,5	dB
Absolute attenuation	α				
50,00 ... 860,00 MHz		35	44	—	dB
860,00 ... 890,00 MHz		25	33	—	dB
890,00 ... 906,00 MHz		23	27	—	dB
950,00 ... 1000,00 MHz		22	26	—	dB
1000,00 ... 2700,00 MHz		30	35	—	dB
2700,00 ... 4000,00 MHz		5	9	—	dB

Characteristics channel 2 (Port 2 - Ant)

Operable temperature range $T = 0$ to 40°C

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

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

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

		min.	typ.	max.	
Center frequency	f_c	—	903,65	—	MHz
Maximum insertion attenuation	α_{max}				
902,15 ... 905,15 MHz		—	2,1	3,0	dB
902,15 ... 905,15 MHz		—	0,3	1,5	dB
Absolute attenuation	α				
50,00 ... 830,00 MHz		33	37	—	dB
830,00 ... 885,00 MHz		18	21	—	dB
923,00 ... 928,00 MHz		26	33	—	dB
960,00 ... 1350,00 MHz		26	34	—	dB
1350,00 ... 1450,00 MHz		45	52	—	dB
1450,00 ... 3000,00 MHz		27	30	—	dB
3000,00 ... 4000,00 MHz		20	25	—	dB



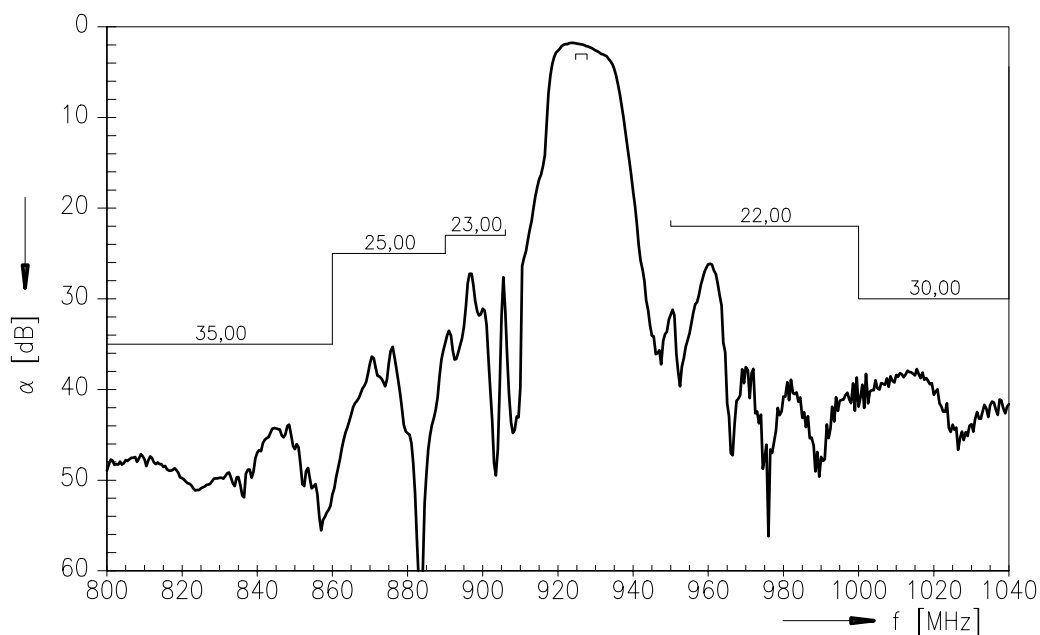
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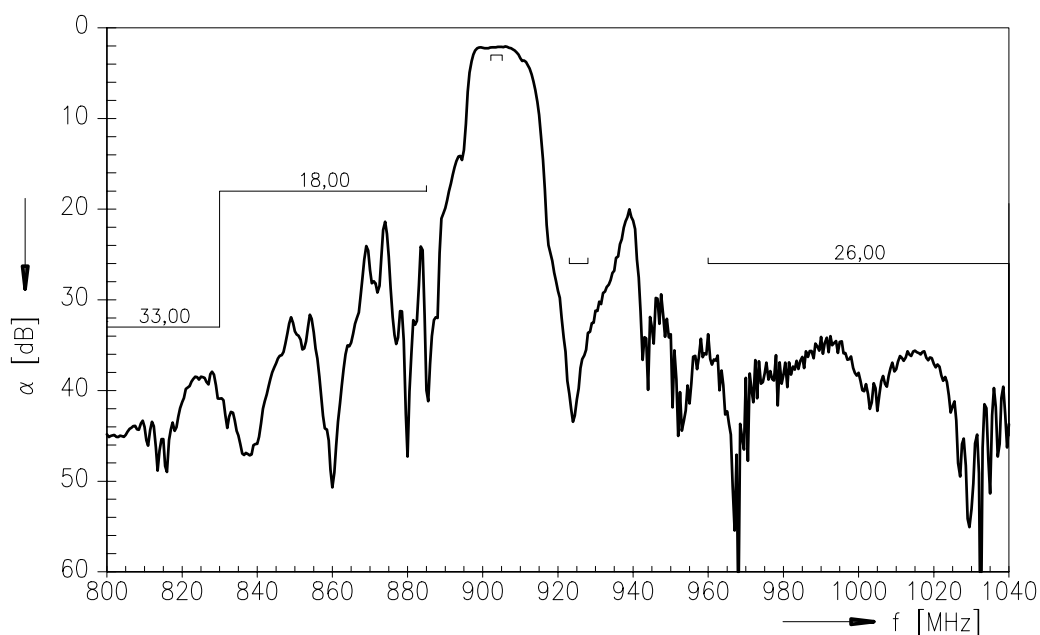
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Data Sheet

Frequency response channel 1 :



Frequency response channel 2 :





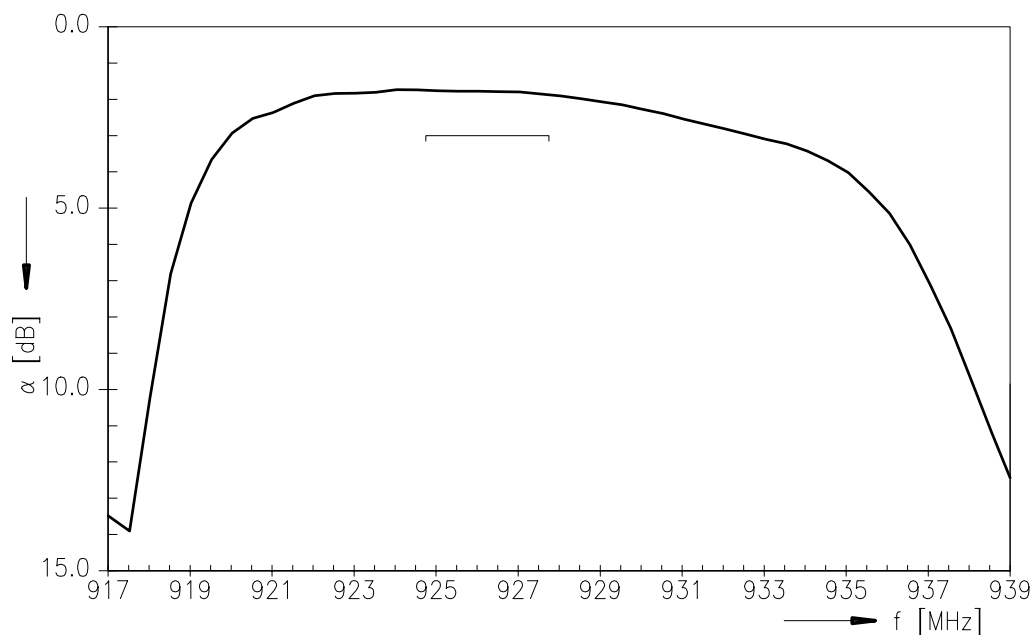
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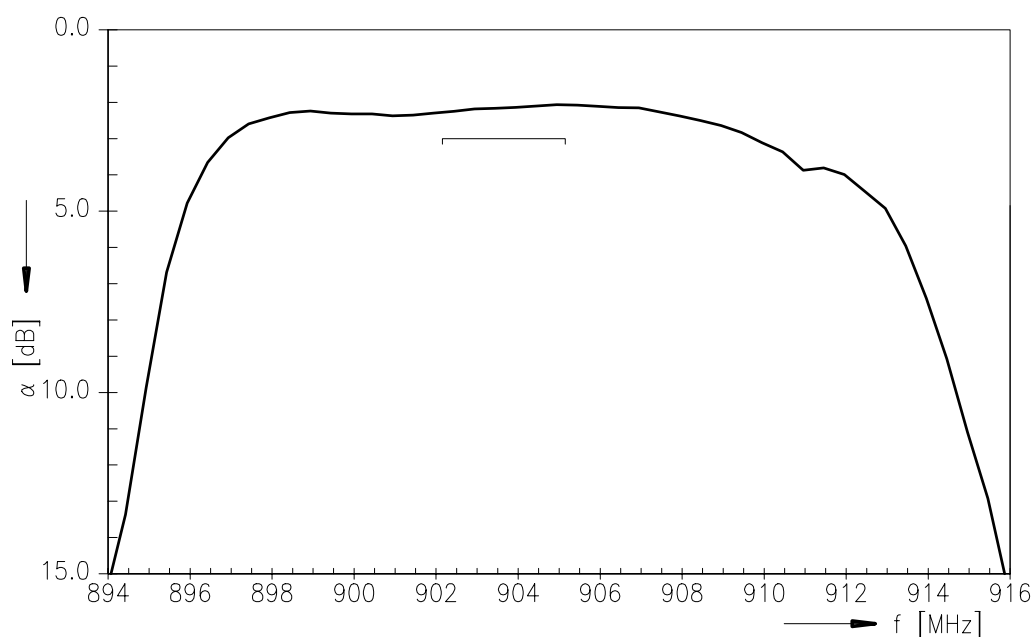
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Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)





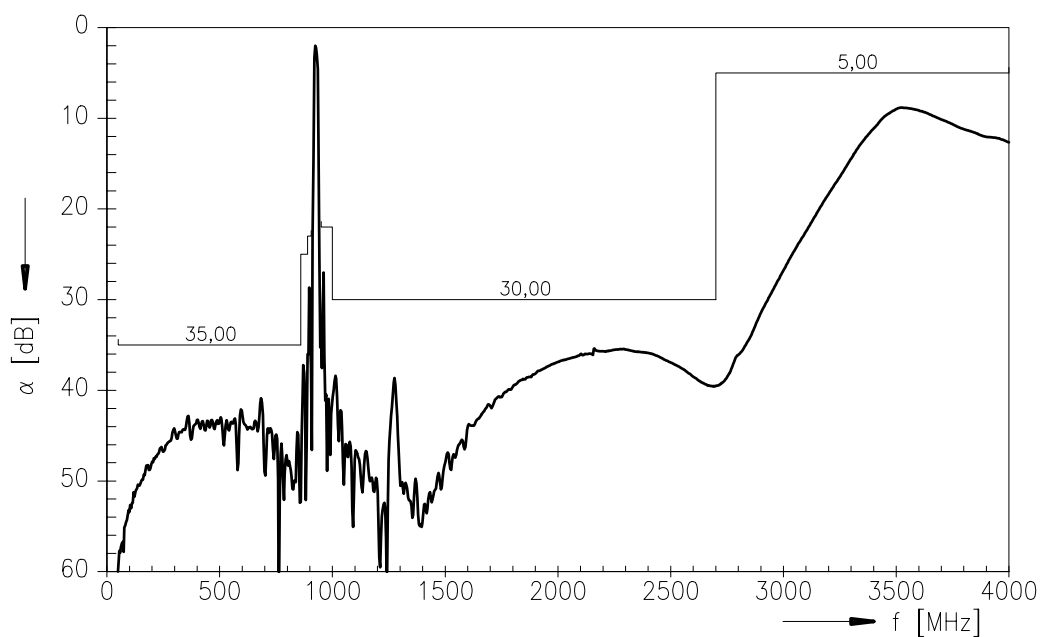
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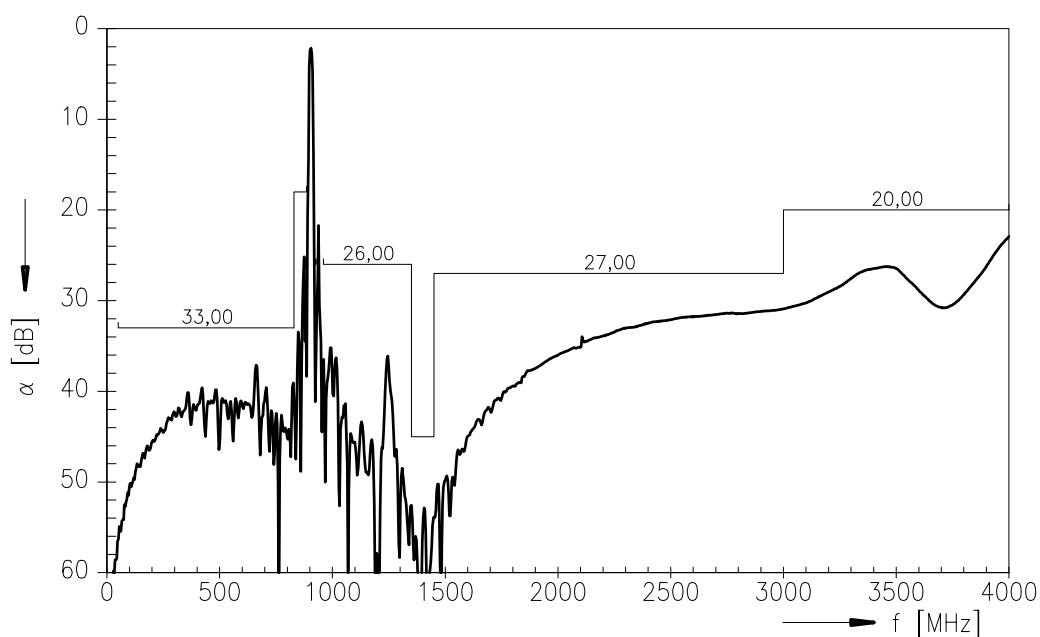
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Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)





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Isolation between channel 1 and channel 2

Operating temperature range $T = 0$ to $+40$ °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				
Rx: 924,75 ... 927,75 MHz		27	33	—	dB
Tx: 902,15 ... 905,15 MHz		25	29	—	dB

Isolation between channel 1 and channel 2 :

