Siemens Matsushita Components

SAW Components
Low-Loss Duplexer for Mobile Communication

B4035
931,0 MHz
886,0 MHz

Data Sheet

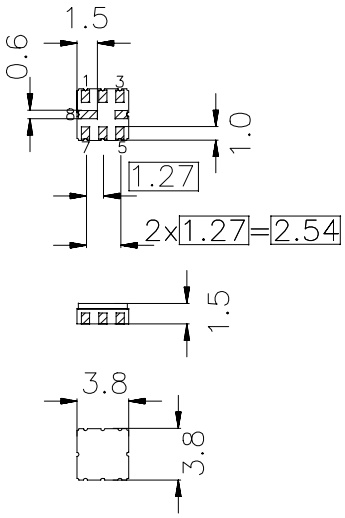
Ceramic package **QCC8B**

Features

- Compact RF duplexer for cordless telephone CT1+
- No matching network required for operation at 50 Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

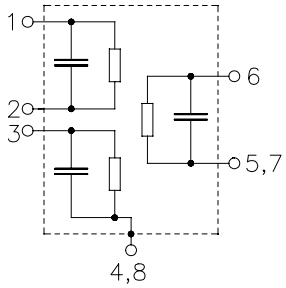
- Ni, gold-plated



Dimensions in mm, approx. weight 0,07 g

Pin configuration

6	Ant
1	Port 1 (Rx/Tx)
3	Port 2 (Tx/Rx)
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
B4035	B39931-B4035-Z810	C61157-A7-A46	F61074-V8037-Z000

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

Maximum ratings

Operating temperature range	T	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)

Operating temperature range T = 0 to +60 °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	—	931,0	—	MHz
Maximum insertion attenuation	α_{max}				
930,00 ... 932,00 MHz		—	3,6	4,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
930,00 ... 932,00 MHz		—	0,3	0,8	dB
Absolute attenuation	α				
0,30 ... 859,00 MHz		52	57	—	dB
859,00 ... 885,00 MHz		40	45	—	dB
885,00 ... 889,40 MHz		43	50	—	dB
889,40 ... 910,60 MHz		30	35	—	dB
910,60 ... 921,30 MHz		5	21	—	dB
940,70 ... 943,00 MHz		5	19	—	dB
943,00 ... 949,00 MHz		17	31	—	dB
949,00 ... 972,80 MHz		30	38	—	dB
972,80 ... 1100,00 MHz		52	55	—	dB
1100,00 ... 1350,00 MHz		41	49	—	dB
1350,00 ... 2000,00 MHz		20	25	—	dB
2000,00 ... 3000,00 MHz		—	9	—	dB

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Characteristics channel 2 (Port 2 - Ant)

Operating temperature range T = 0 to +60 °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	—	886,0	—	MHz
Maximum insertion attenuation	α_{max}				
885,00 ... 887,00 MHz		—	3,4	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
885,00 ... 887,00 MHz		—	0,3	0,8	dB
Absolute attenuation	α				
0,30 ... 845,00 MHz		50	54	—	dB
845,00 ... 865,60 MHz		33	38	—	dB
865,60 ... 876,30 MHz		5	23	—	dB
895,70 ... 904,00 MHz		6	22	—	dB
904,00 ... 927,80 MHz		32	37	—	dB
927,80 ... 930,00 MHz		35	49	—	dB
930,00 ... 951,00 MHz		45	51	—	dB
951,00 ... 1100,00 MHz		48	52	—	dB
1100,00 ... 1350,00 MHz		40	48	—	dB
1350,00 ... 2000,00 MHz		25	31	—	dB
2000,00 ... 3000,00 MHz		10	15	—	dB

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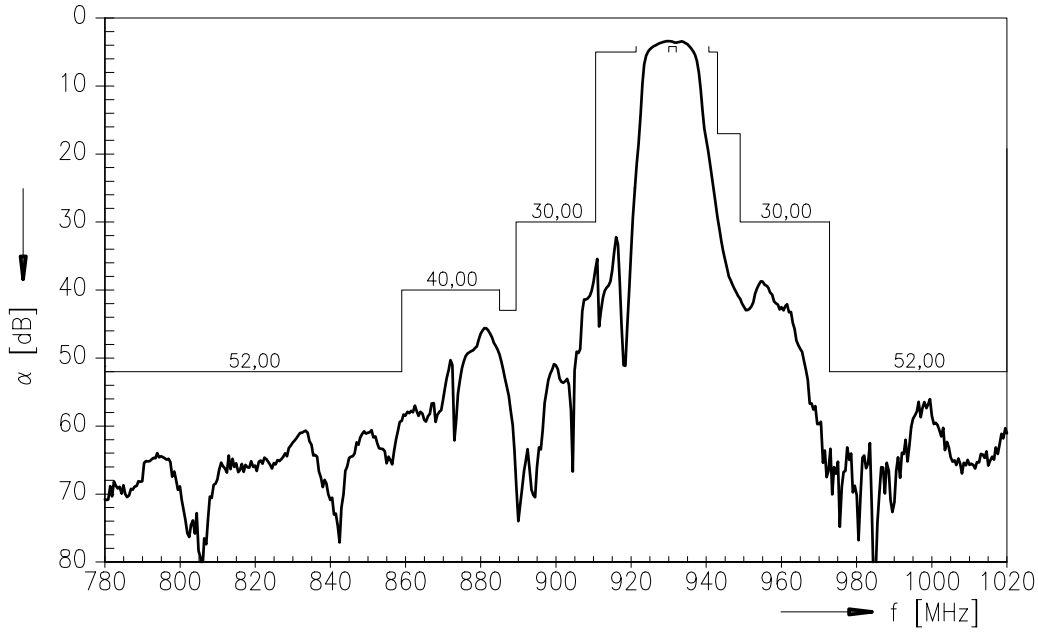
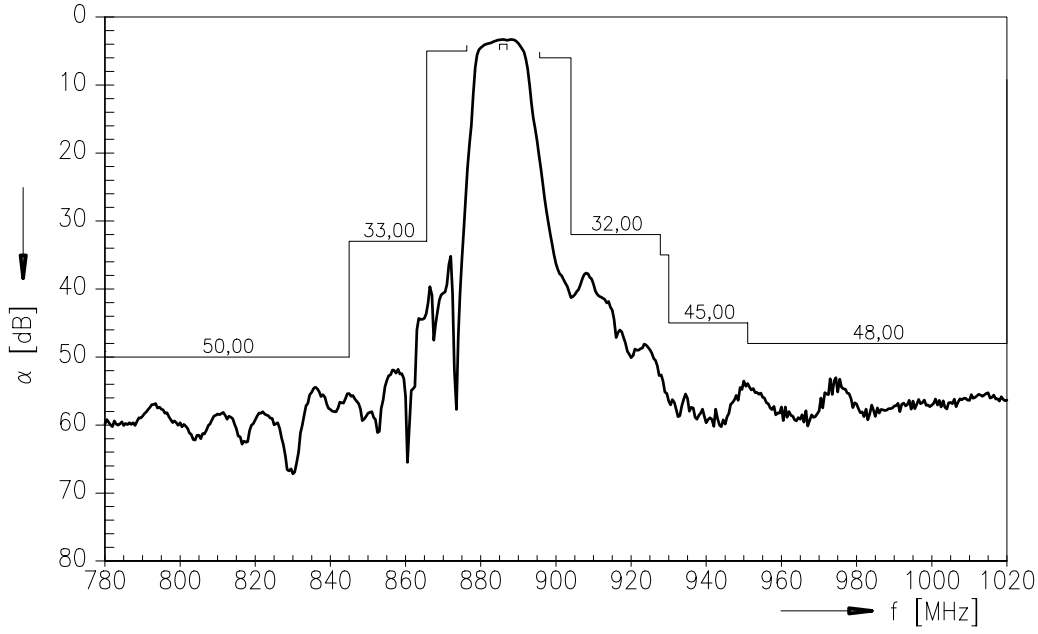
Frequency response channel 1 :

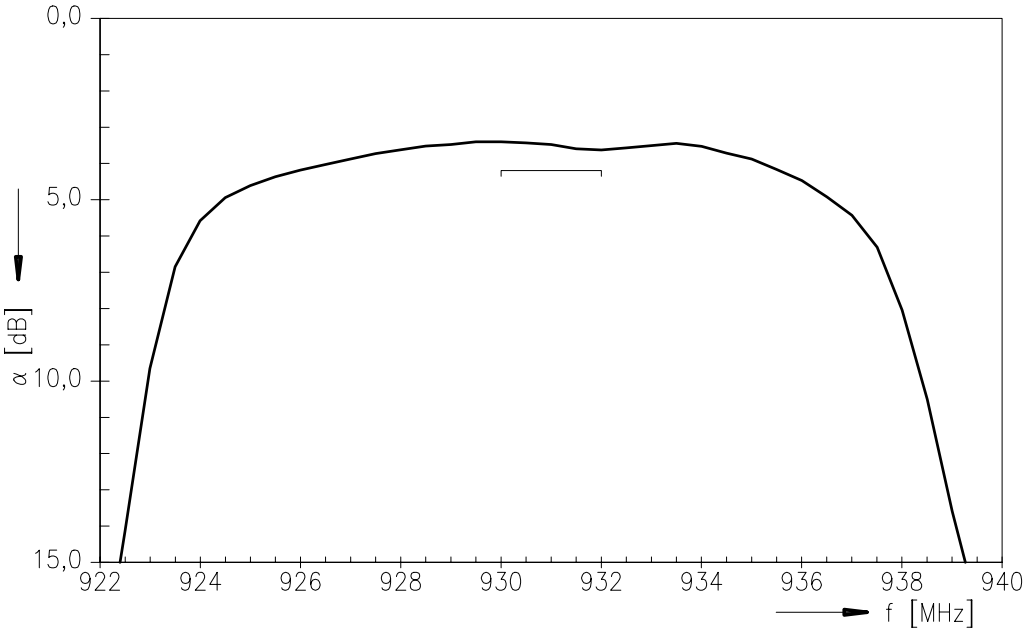


Frequency response channel 2 :

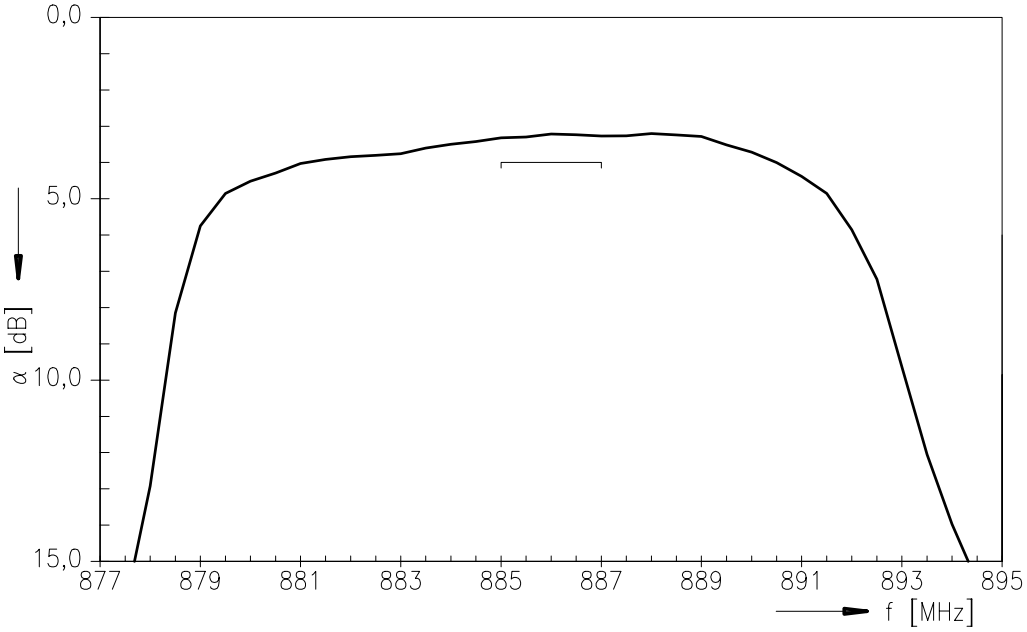


Data Sheet

Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)



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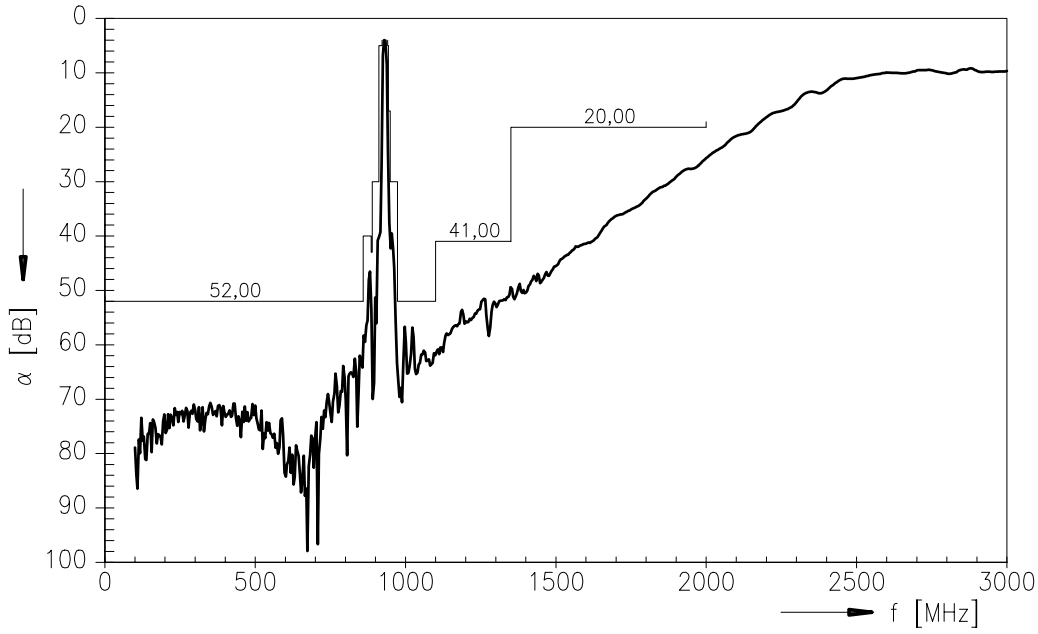
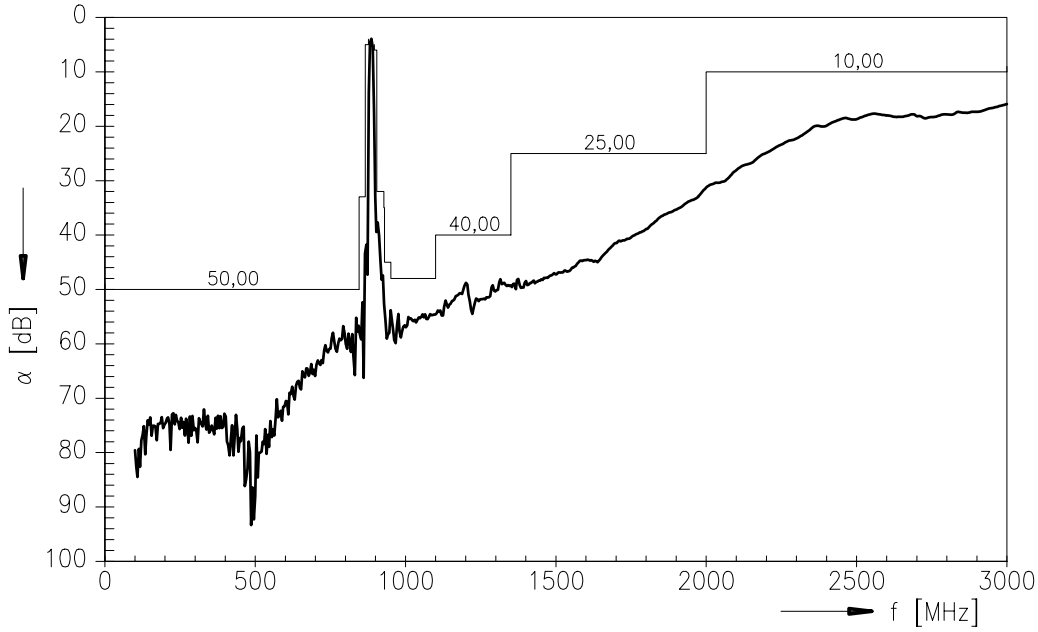
Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)



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Isolation between channel 1 and channel 2

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

		min.	typ.	max.	
Absolute attenuation	α				
930,00 ... 932,00 MHz		45	59	—	dB
885,00 ... 887,00 MHz		40	50	—	dB

Isolation between channel 1 and channel 2 :