



Siemens Matsushita Components

SAW Components

Low-Loss Duplexer for Mobile Communication

B4036
959,5 MHz
914,5 MHz

Data Sheet

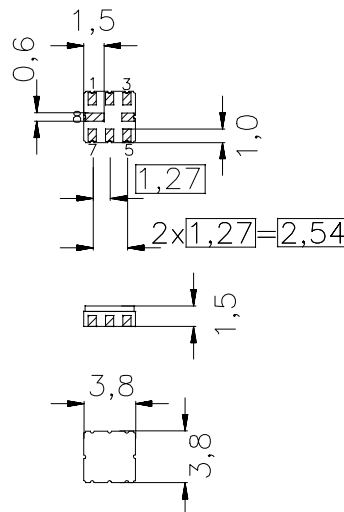
Features

- Compact RF duplexer for cordless telephone CT1
- No matching network required for operation at 50 Ω
- Ceramic package for Surface Mounted Technology (SMT)

Terminals

- Ni, gold-plated

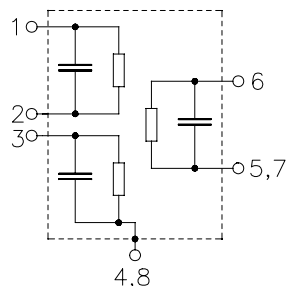
Ceramic package QCC8B



Dimensions in mm, approx. weight 0,07 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4036	B39961-B4036-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (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 $+60\text{ }^{\circ}\text{C}$

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

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

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

		min.	typ.	max.	
Center frequency	f_c	—	959,5	—	MHz
Maximum insertion attenuation	α_{max}	—	3,6	4,2	dB
959,00 ... 960,00 MHz		—	3,6	4,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,3	0,8	dB
959,00 ... 960,00 MHz		—	0,3	0,8	dB
Absolute attenuation	α				
0,30 ... 888,00 MHz		50	55	—	dB
888,00 ... 913,00 MHz		42	48	—	dB
913,00 ... 924,10 MHz		45	48	—	dB
924,10 ... 939,10 MHz		30	35	—	dB
939,10 ... 949,80 MHz		5	20	—	dB
969,20 ... 973,00 MHz		5	17	—	dB
973,00 ... 979,50 MHz		15	29	—	dB
979,50 ... 1001,30 MHz		35	40	—	dB
1001,30 ... 1100,00 MHz		50	54	—	dB
1100,00 ... 1350,00 MHz		40	47	—	dB
1350,00 ... 2000,00 MHz		25	29	—	dB
2000,00 ... 3000,00 MHz		10	15	—	dB



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Characteristics channel 2 (Port 2 - Ant)

Operating temperature range: $T = 0$ to $+60\text{ }^{\circ}\text{C}$

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	—	914,5	—	MHz
Maximum insertion attenuation	α_{max}	—	3,4	4,0	dB
914,00 ... 915,00 MHz		—	3,4	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,3	0,8	dB
914,00 ... 915,00 MHz		—	0,3	0,8	dB
Absolute attenuation	α				
0,30 ... 825,00 MHz		50	59	—	dB
825,00 ... 871,10 MHz		46	52	—	dB
871,10 ... 872,10 MHz		48	53	—	dB
872,10 ... 894,10 MHz		28	32	—	dB
894,10 ... 904,80 MHz		5	19	—	dB
924,20 ... 932,50 MHz		6	22	—	dB
932,50 ... 956,30 MHz		33	37	—	dB
956,30 ... 970,00 MHz		44	47	—	dB
970,00 ... 1100,00 MHz		50	55	—	dB
1100,00 ... 1350,00 MHz		40	47	—	dB
1350,00 ... 1850,00 MHz		20	26	—	dB
1850,00 ... 2000,00 MHz		15	20	—	dB
2000,00 ... 3000,00 MHz		—	8	—	dB



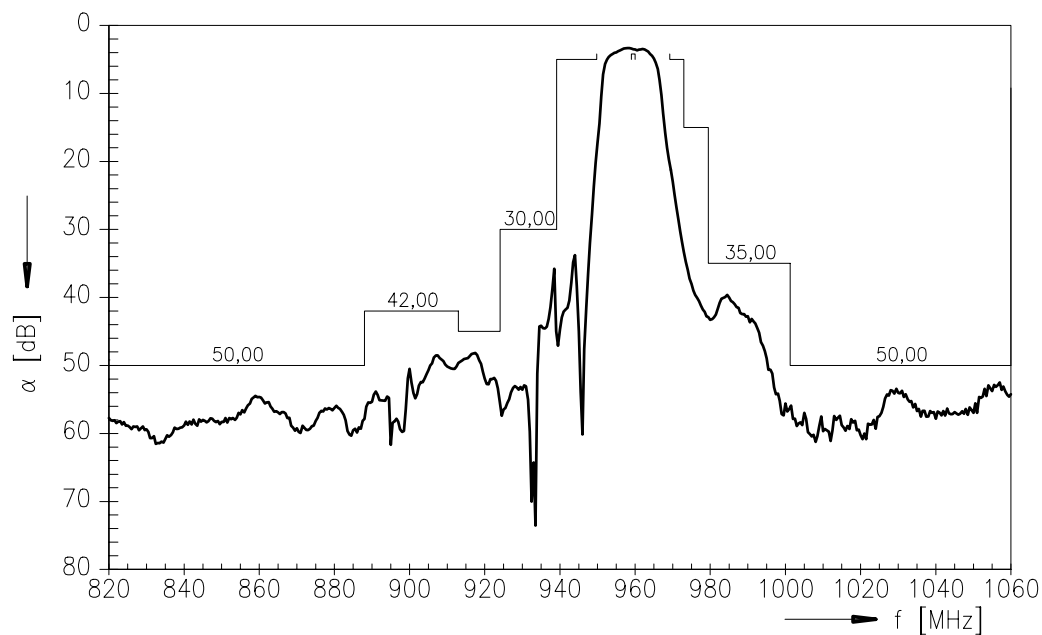
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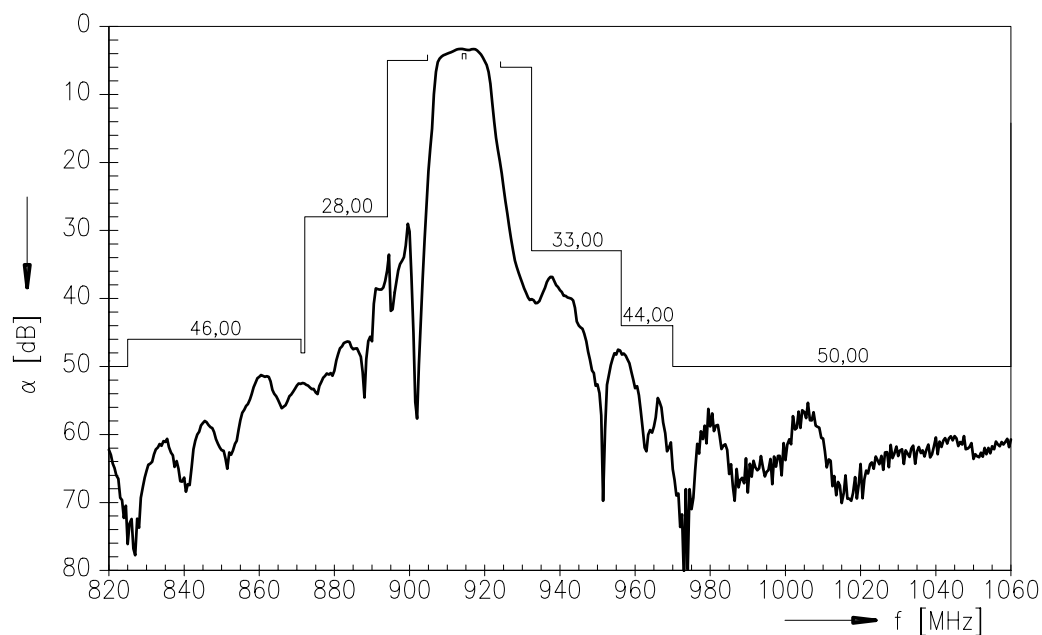
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Data Sheet

Frequency response channel 1 :



Frequency response channel 2 :





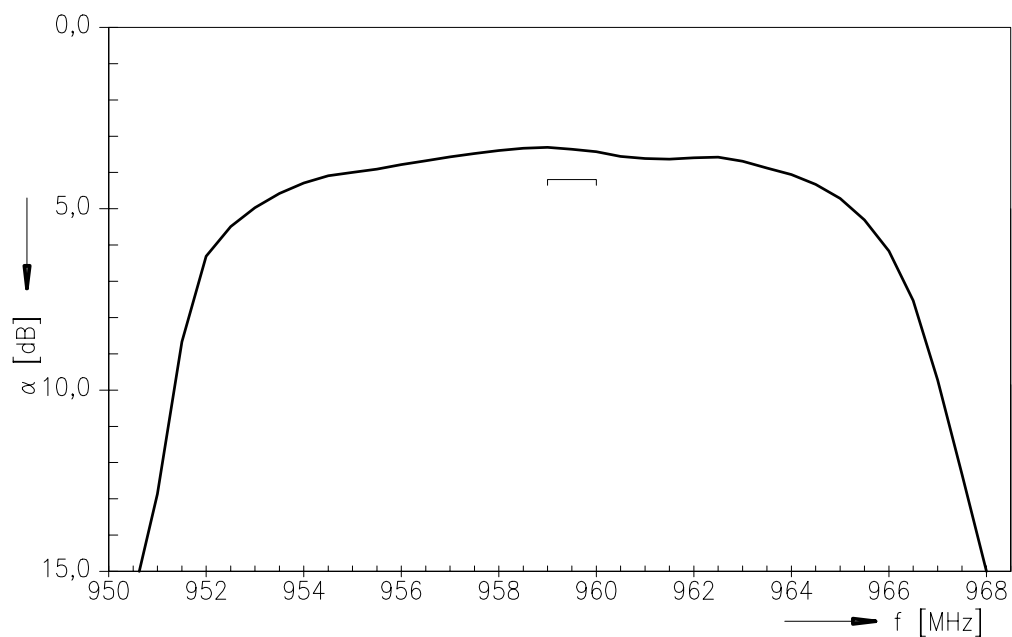
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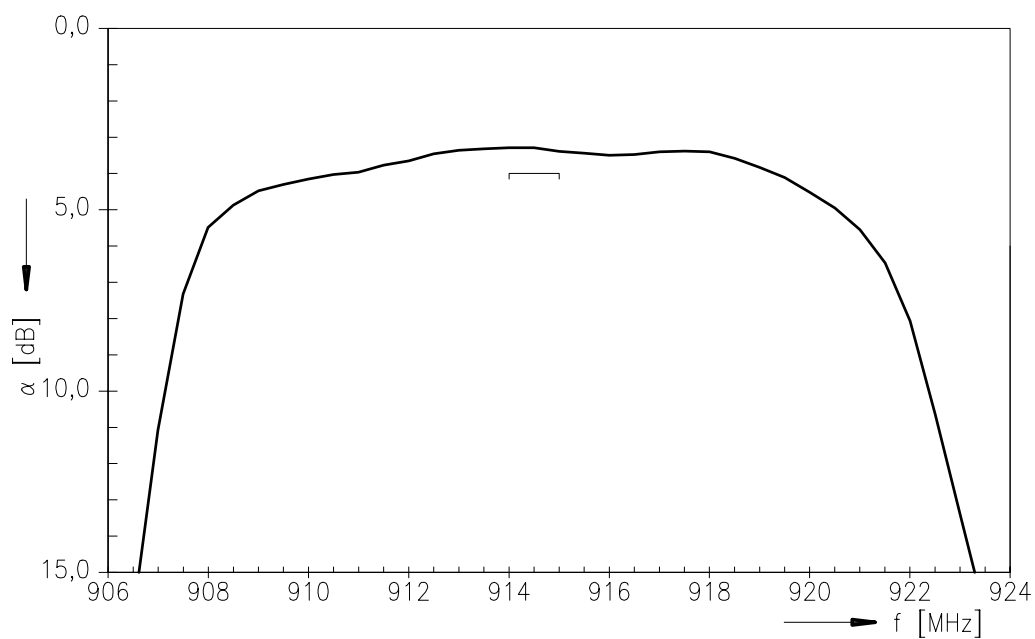
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Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)





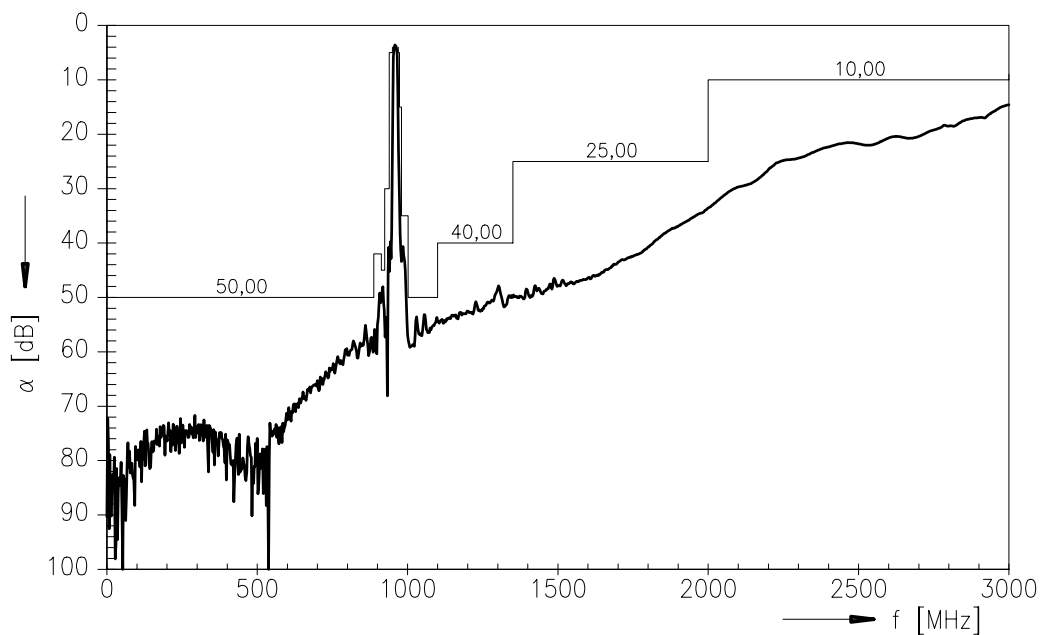
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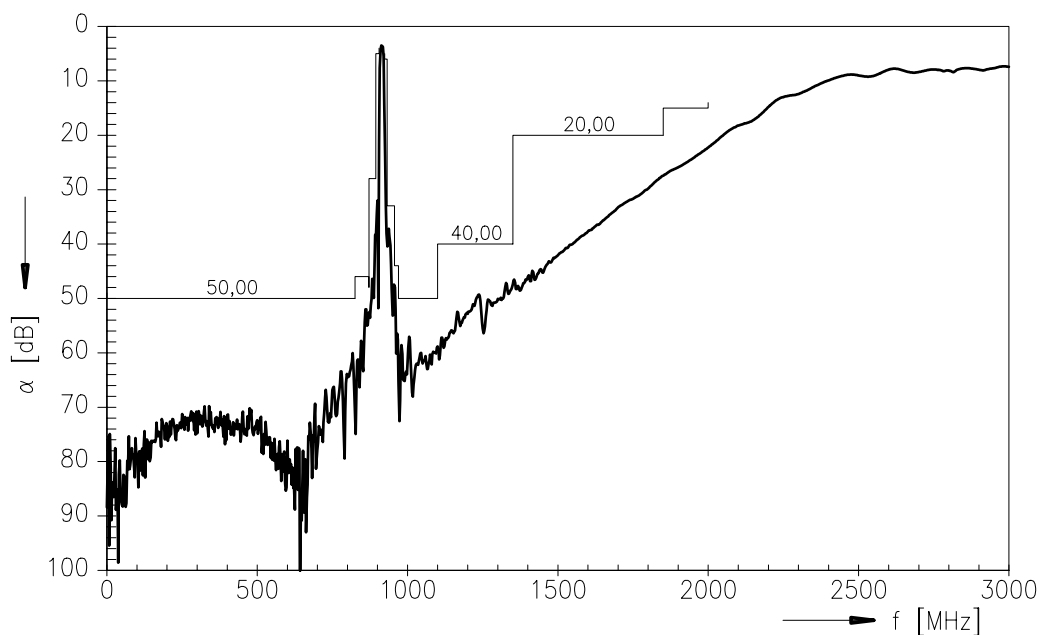
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Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)





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Isolation between channel 1 and channel 2

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

		min.	typ.	max.	
Absolute attenuation	α				
	959,00 ... 960,00 MHz	40	46	—	dB
	914,00 ... 915,00 MHz	43	50	—	dB

Isolation between channel 1 and channel 2 :

