



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





SAW Components
Low-Loss Duplexer for Mobile Communication

B4006
959.5 MHz
914.5 MHz

Data Sheet

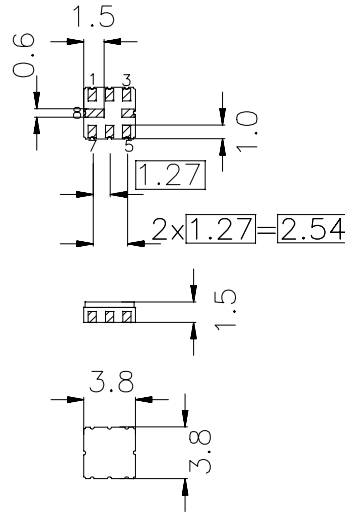
Ceramic package **QCC 8B**

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

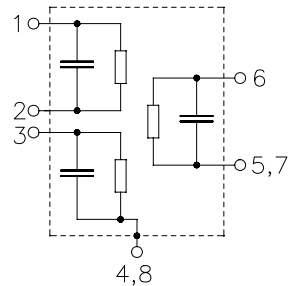
- Ni, gold-plated



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 |
|-------|-------------------|----------------------------------|----------------------|
| B4006 | B39961-B4006-Z810 | C61157-A7-A46 | F61074-V8037-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | |
|----------------------------|-----------|-----------|-----|
| Operable temperature range | T_A | 0 /+ 60 | °C |
| Storage temperature range | T_{stg} | - 40/+ 85 | °C |
| DC voltage | V_{DC} | 3 | V |
| Input power | P_{IN} | 17 | dBm |



SAW Components
Low-Loss Duplexer for Mobile Communication

B4006
959.5 MHz
914.5 MHz

Data Sheet

Characteristics channel 1 (Port 1 - Ant)

Operable temperature range: $T_A = 0$ to $+60^\circ\text{C}$
 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. | |
|--------------------------------------|-------------------------|------|-------|------|-----|
| Center frequency | f_c | — | 959.5 | — | MHz |
| Maximum insertion attenuation | α_{max} | — | 3.3 | 4.0 | dB |
| | 959.00 ... 960.00 MHz | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | — | 0.7 | 2.0 | dB |
| | 959.00 ... 960.00 MHz | | | | |
| Absolute attenuation | α | | | | |
| | 450.00 ... 850.00 MHz | 50 | 61 | — | dB |
| | 850.00 ... 917.20 MHz | 36 | 39 | — | dB |
| | 917.20 ... 938.60 MHz | 32 | 35 | — | dB |
| | 938.60 ... 949.30 MHz | 8 | 18 | — | dB |
| | 969.70 ... 970.70 MHz | 10 | 25 | — | dB |
| | 970.70 ... 980.40 MHz | 17 | 27 | — | dB |
| | 980.40 ... 981.40 MHz | 32 | 40 | — | dB |
| | 981.40 ... 1001.80 MHz | 26 | 32 | — | dB |
| | 1001.80 ... 1002.80 MHz | 30 | 36 | — | dB |
| | 1015.00 ... 1050.00 MHz | 50 | 54 | — | dB |
| | 1050.00 ... 1350.00 MHz | 43 | 48 | — | dB |
| | 1350.00 ... 1850.00 MHz | 26 | 29 | — | dB |
| | 1850.00 ... 2000.00 MHz | 21 | 26 | — | dB |



SAW Components
Low-Loss Duplexer for Mobile Communication

B4006
959.5 MHz
914.5 MHz

Data Sheet

Characteristics channel 2 (Port 2 - Ant)

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

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. | |
|--------------------------------------|-------------------------|------|-------|------|-----|
| Center frequency | f_c | — | 914.5 | — | MHz |
| Maximum insertion attenuation | α_{max} | — | 3.0 | 4.0 | dB |
| | 914.00 ... 915.00 MHz | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | — | 0.7 | 2.0 | dB |
| | 914.00 ... 915.00 MHz | | | | |
| Absolute attenuation | α | | | | |
| | 450.00 ... 850.00 MHz | 50 | 54 | — | dB |
| | 850.00 ... 872.20 MHz | 45 | 53 | — | dB |
| | 872.20 ... 893.60 MHz | 28 | 39 | — | dB |
| | 893.60 ... 904.30 MHz | 6 | 18 | — | dB |
| | 924.70 ... 925.70 MHz | 12 | 27 | — | dB |
| | 925.70 ... 935.40 MHz | 20 | 30 | — | dB |
| | 935.40 ... 936.40 MHz | 32 | 38 | — | dB |
| | 936.40 ... 956.80 MHz | 27 | 32 | — | dB |
| | 956.80 ... 959.00 MHz | 32 | 38 | — | dB |
| | 959.00 ... 1000.00 MHz | 37 | 44 | — | dB |
| | 1000.00 ... 1350.00 MHz | 42 | 47 | — | dB |
| | 1350.00 ... 1850.00 MHz | 32 | 35 | — | dB |
| | 1850.00 ... 2000.00 MHz | 27 | 32 | — | dB |

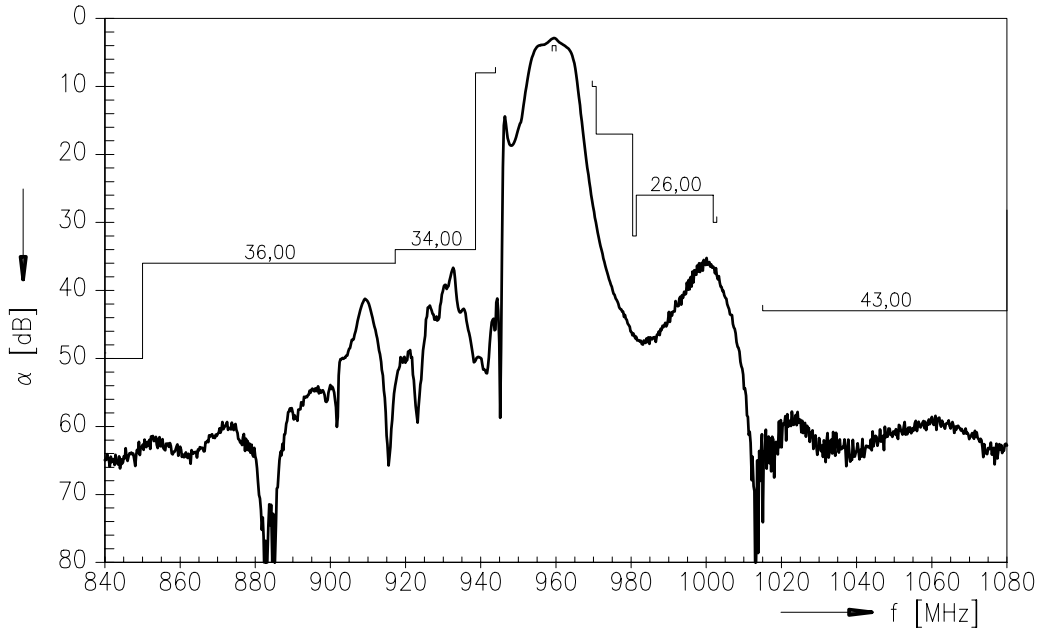


SAW Components
Low-Loss Duplexer for Mobile Communication

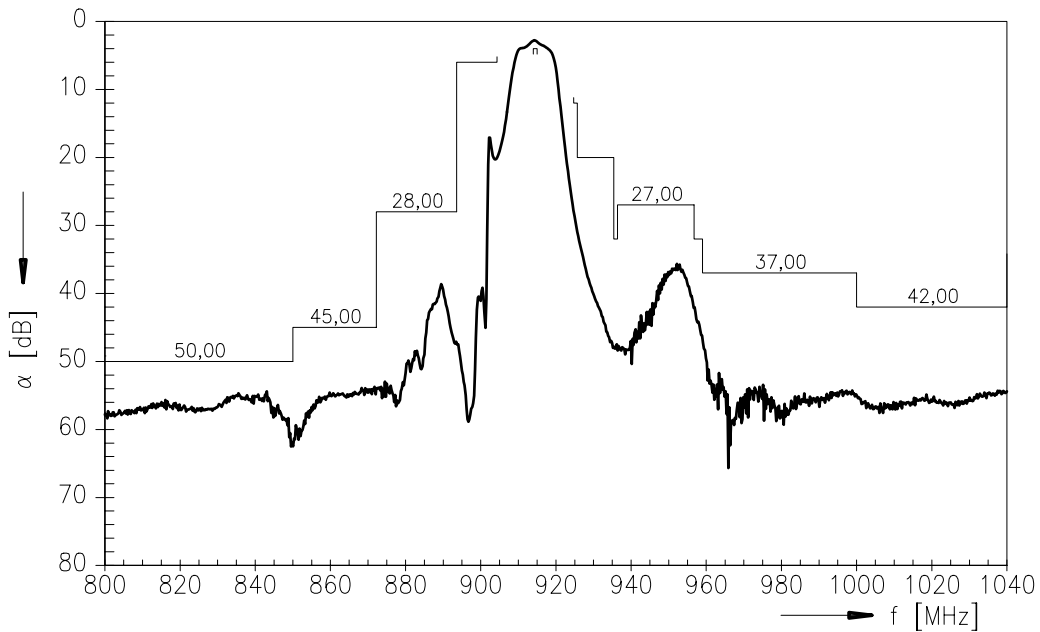
B4006
959.5 MHz
914.5 MHz

Data Sheet

Frequency response channel 1 :



Frequency response channel 2 :



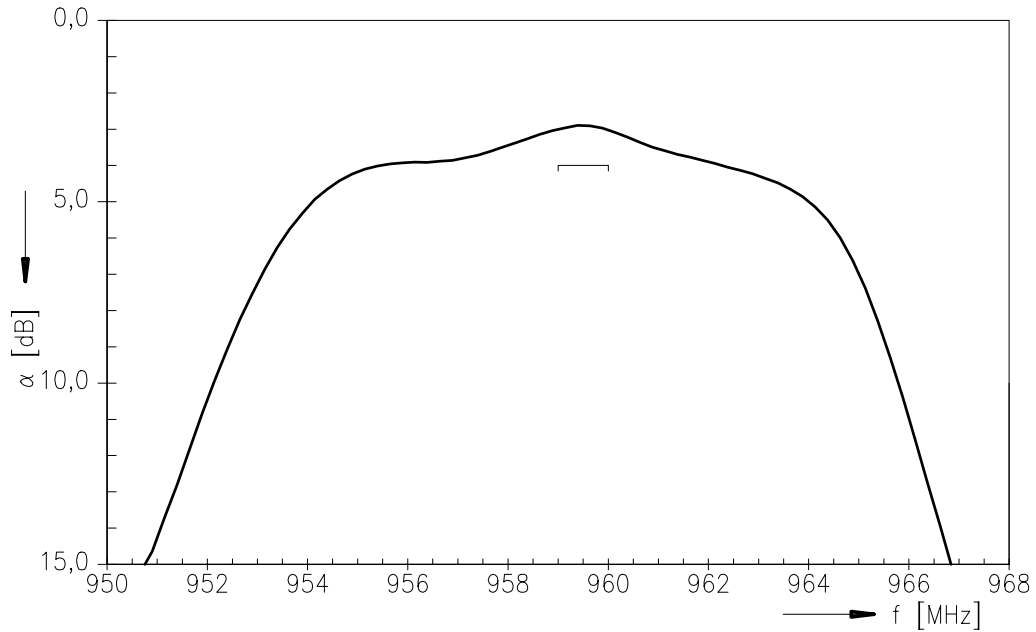


SAW Components
Low-Loss Duplexer for Mobile Communication

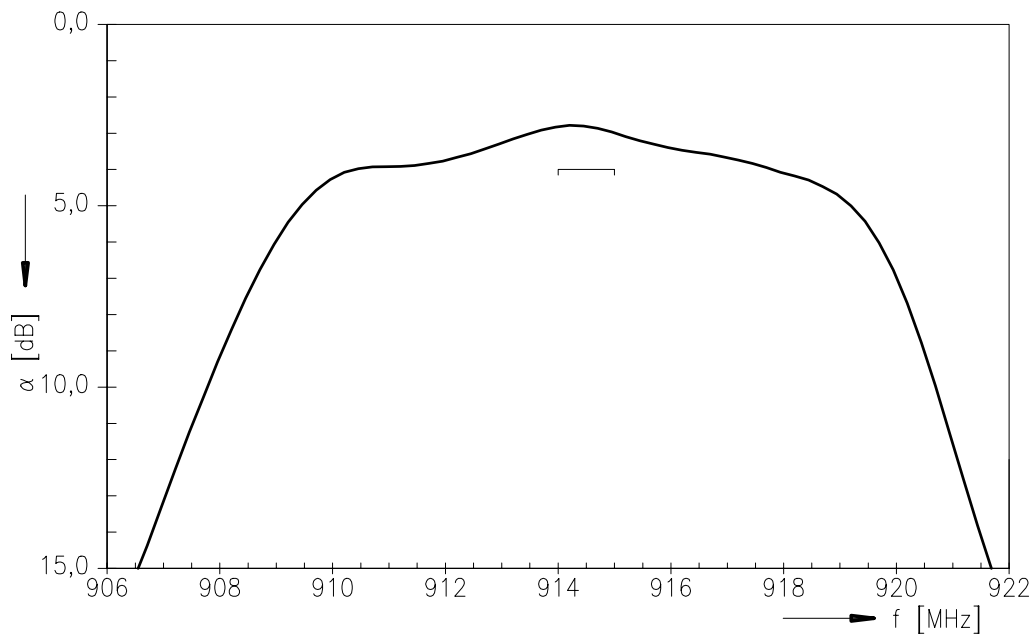
B4006
959.5 MHz
914.5 MHz

Data Sheet

Frequency response channel 1 : (passband)



Frequency response channel 2 : (passband)



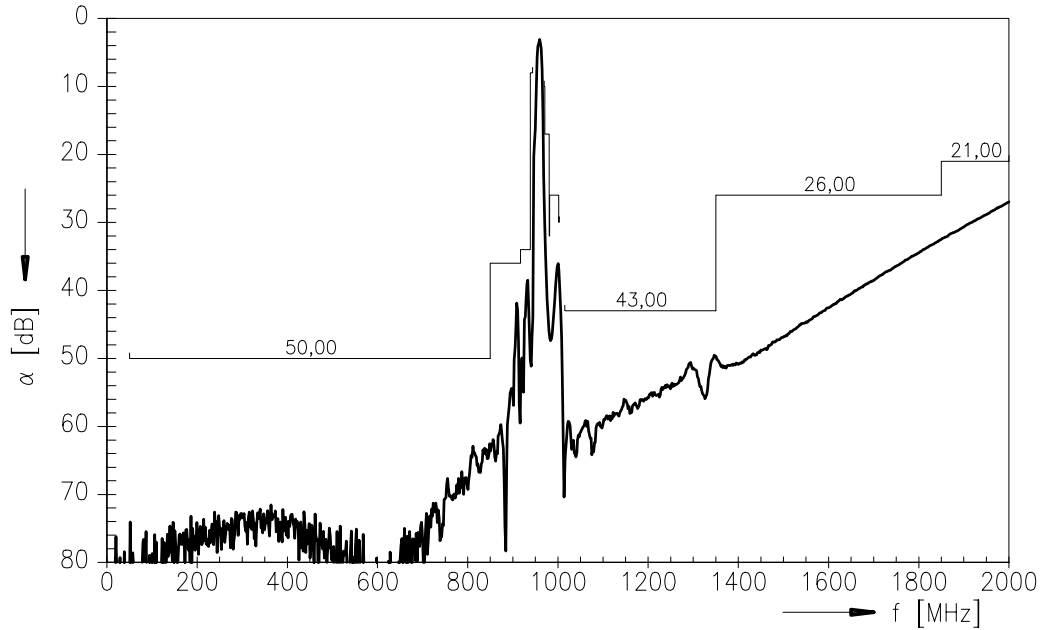


SAW Components
Low-Loss Duplexer for Mobile Communication

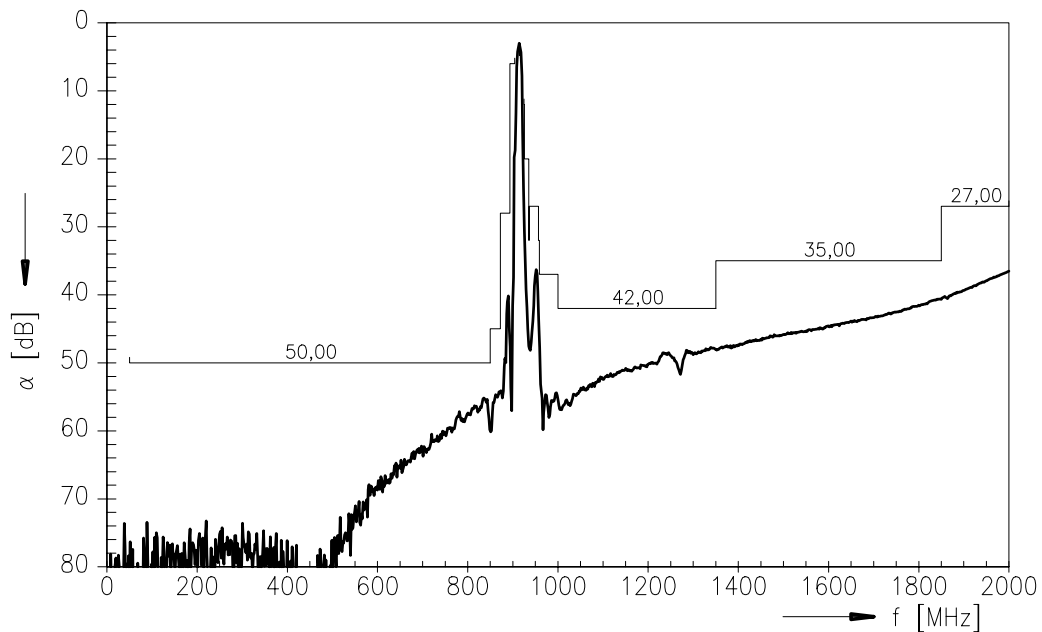
B4006
959.5 MHz
914.5 MHz

Data Sheet

Frequency response channel 1 : (wideband)



Frequency response channel 2 : (wideband)





Siemens Matsushita Components

SAW Components
Low-Loss Duplexer for Mobile Communication

B4006
959.5 MHz
914.5 MHz

Data Sheet

Isolation between channel 1 and channel 2

Operating temperature range $T = 0 \text{ to } +60 \text{ }^\circ\text{C}$
 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. | |
|-----------------------------|-----------------------|------|------|------|----|
| Absolute attenuation | α | | | | |
| | 959,00 ... 960,00 MHz | 36 | 41 | — | dB |
| | 914,00 ... 915,00 MHz | 39 | 51 | — | dB |

Isolation between channel 1 and channel 2 :

