



SAW Components

Data Sheet B7836

Data Sheet

A stylized, grayscale globe with a grid of latitude and longitude lines. The word "EPCOS" is written in large, white, 3D block letters across the globe, appearing to wrap around it. The globe is set against a dark, circular background with a subtle gradient.



SAW Components

B7836

Low-Loss Filter for Mobile Communication

1501,5 MHz

Preliminary Data



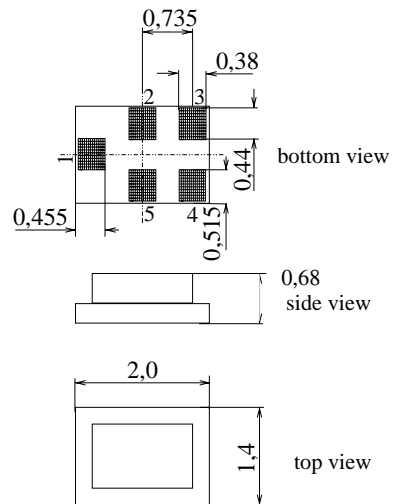
Chip sized SAW package QCS5C

Features

- Low-loss RF filter for PDC system, receive path
- Small insertion attenuation
- Low amplitude ripple
- Package for **Surface Mounted Technology (SMT)**
- Chip Sized SAW Package (CSSP)

Terminals

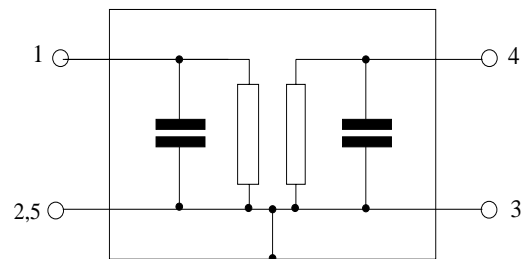
- Gold-plated Ni



Dimensions in mm, approx. weight 0,007 g

Pin configuration

- 1 Input
- 4, Output
- 2, 3, 5 To be grounded



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B7836 | B39152-B7836-C710 | C61157-A7-A111 | F61074-V8151-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | | |
|-----------------------------|-----------|-----------|-----|---|
| Operating temperature range | T | - 20/+ 85 | °C | duty cycle 1:3, source and load impedance 50 Ω |
| Storage temperature range | T_{stg} | - 40/+ 85 | °C | |
| DC voltage | V_{DC} | 3 | V | |
| Source power | P_S | 13 | dBm | |



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Characteristics

Operating temperature range: $T = +25 \pm 2^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

| | | | | min. | typ. | max. | |
|--------------------------------------|-----------------|-------------------|-----|------|--------|------|-----|
| Center frequency | f_C | | | — | 1501,5 | — | MHz |
| Maximum insertion attenuation | α_{\max} | | | — | 1,5 | 2,0 | dB |
| | | 1487,0 ... 1516,0 | MHz | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | | | — | 0,3 | 0,8 | dB |
| | | 1487,0 ... 1516,0 | MHz | | | | |
| Absolute attenuation | α | | | | | | |
| | | 1227,0 ... 1256,0 | MHz | 35 | 36 | — | dB |
| | | 1241,5 | MHz | 35 | 36 | — | dB |
| | | 1357,0 ... 1386,0 | MHz | 25 | 30 | — | dB |
| | | 1371,5 | MHz | 25 | 30 | — | dB |
| | | 1422,0 ... 1451,0 | MHz | 21 | 23 | — | dB |
| | | 1451,0 ... 1468,0 | MHz | 11 | 15 | — | dB |
| | | 1552,0 ... 1581,0 | MHz | 13 | 16 | — | dB |
| | | 1617,0 ... 1646,0 | MHz | 22 | 27 | — | dB |
| | | 1747,0 ... 1776,0 | MHz | 28 | 34 | — | dB |



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 Terminating load impedance: $Z_L = 50 \Omega$

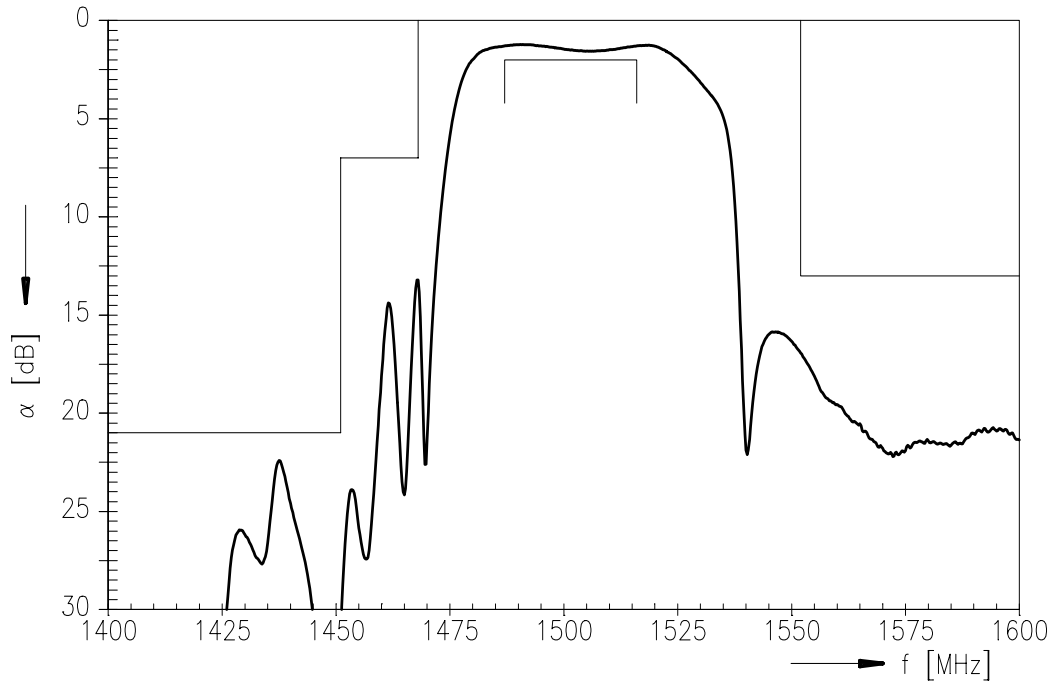
| | | | | min. | typ. | max. | |
|--------------------------------------|-------------------|----------------|--|------|--------|------|-----|
| Center frequency | | f_C | | — | 1501,5 | — | MHz |
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| | 1487,0 ... 1516,0 | MHz | | | | | |
| Amplitude ripple (p-p) | | $\Delta\alpha$ | | — | 0,3 | 0,8 | dB |
| | 1487,0 ... 1516,0 | MHz | | | | | |
| Absolute attenuation | | α | | | | | |
| | 1227,0 ... 1256,0 | MHz | | 35 | 36 | — | dB |
| | 1241,5 | MHz | | 35 | 36 | — | dB |
| | 1357,0 ... 1386,0 | MHz | | 25 | 30 | — | dB |
| | 1371,5 | MHz | | 25 | 30 | — | dB |
| | 1422,0 ... 1451,0 | MHz | | 21 | 23 | — | dB |
| | 1451,0 ... 1468,0 | MHz | | 7 | 13 | — | dB |
| | 1552,0 ... 1581,0 | MHz | | 13 | 16 | — | dB |
| | 1617,0 ... 1646,0 | MHz | | 22 | 25 | — | dB |
| | 1747,0 ... 1776,0 | MHz | | 28 | 34 | — | dB |



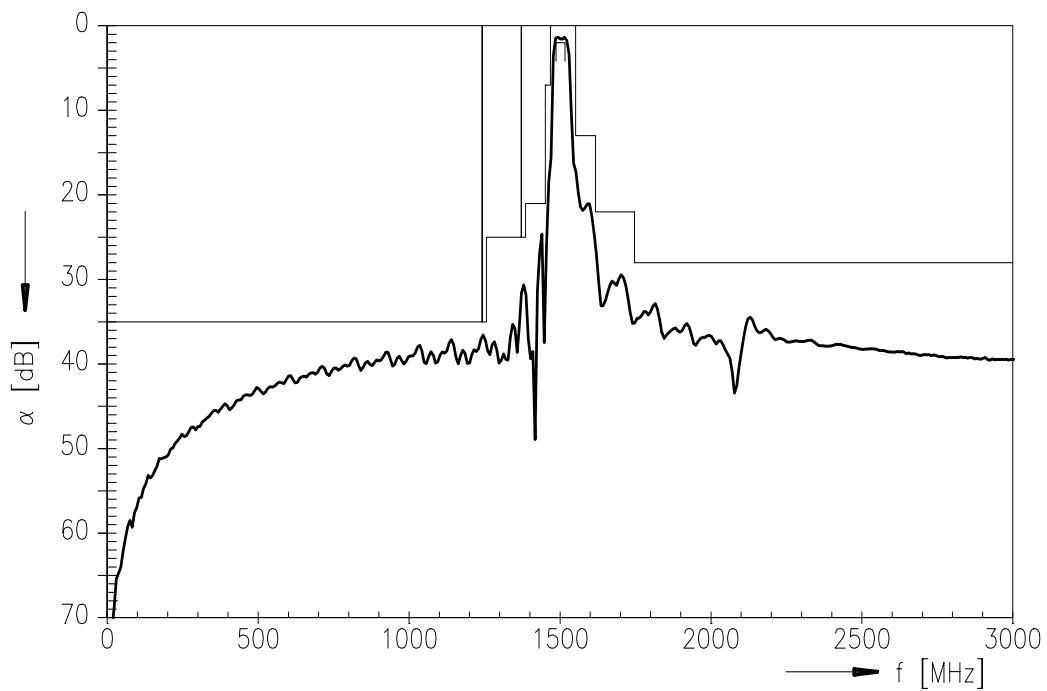
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Transfer function (pass band) :



Transfer function (broad band) :





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