

# *SAW Components*

*Data Sheet B3835*

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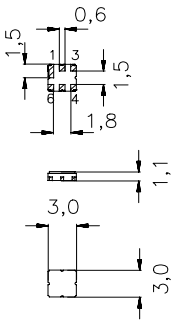
|                                                 |                   |
|-------------------------------------------------|-------------------|
| <b>SAW Components</b>                           | <b>B3835</b>      |
| <b>Low-Loss Filter for Mobile Communication</b> | <b>899,00 MHz</b> |

Data Sheet

**Features**

- Low-loss RF filter for iDEN mobile telephone, transmit path
- Low amplitude ripple
- No matching network required for operation at 50 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**

Ceramic package **DCC6C**



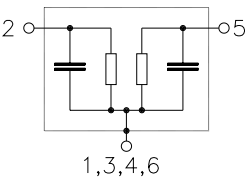
**Terminals**

- Gold-plated Ni

Dimensions in mm, approx. weight 0,037g

**Pin configuration**

- |            |             |  |
|------------|-------------|--|
| 2          | Input       |  |
| 5          | Output      |  |
| 1, 3, 4, 6 | Case ground |  |



| Type  | Ordering code     | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B3835 | B39901-B3835-U410 | C61157-A7-A67                    | F61074-V8088-Z000    |

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

|                            |           |             |     |                                          |
|----------------------------|-----------|-------------|-----|------------------------------------------|
| Operable temperature range | $T$       | – 20 / + 70 | °C  | source impedance 50 Ω<br>continuous wave |
| Storage temperature range  | $T_{stg}$ | – 40 / + 85 | °C  |                                          |
| DC voltage                 | $V_{DC}$  | 0           | V   |                                          |
| Input power max.           | $P_{IN}$  | 7           | dBm |                                          |

|                                          |            |
|------------------------------------------|------------|
| SAW Components                           | B3835      |
| Low-Loss Filter for Mobile Communication | 899,00 MHz |

## Data Sheet



### 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. |     |
|--------------------------------------|-----------------|------|--------|------|-----|
| <b>Center frequency</b>              | $f_c$           | —    | 899,00 | —    | MHz |
| <b>Maximum insertion attenuation</b> | $\alpha_{\max}$ |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 2,4    | 3,0  | dB  |
| <b>Amplitude ripple (p-p)</b>        | $\Delta\alpha$  |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 0,5    | 1,0  | dB  |
| <b>Group delay ripple (p-p)</b>      | $\Delta\tau$    |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 10     | 50   | ns  |
| <b>Attenuation</b>                   | $\alpha_{\min}$ |      |        |      |     |
| 851,000 ... 870,000 MHz              |                 | 42   | 48     | —    | dB  |
| 935,000 ... 940,000 MHz              |                 | 43   | 46     | —    | dB  |
| 1050,650 ... 1055,650MHz             |                 | 42   | 54     | —    | dB  |
| 1205,300 ... 1210,300MHz             |                 | 40   | 50     | —    | dB  |
| 1359,950 ...1364,950MHz              |                 | 35   | 46     | —    | dB  |
| 1792,000 ...1802,000 MHz             |                 | 25   | 42     | —    | dB  |
| 1802,000 ...3000,000 MHz             |                 | 15   | 36     | —    | dB  |
| <b>Input return loss</b>             |                 |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | 10   | 16     | —    | dB  |
| <b>Output return loss</b>            |                 |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | 10   | 15     | —    | dB  |



### Characteristics

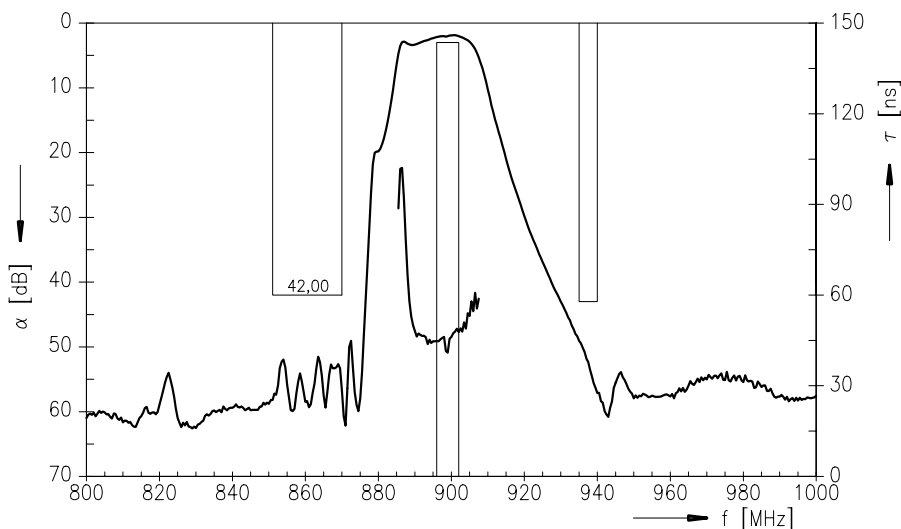
Operating temperature range:  $T = -20$  to  $+70^{\circ}\text{C}$

Terminating source impedance:  $Z_S = 50\ \Omega$

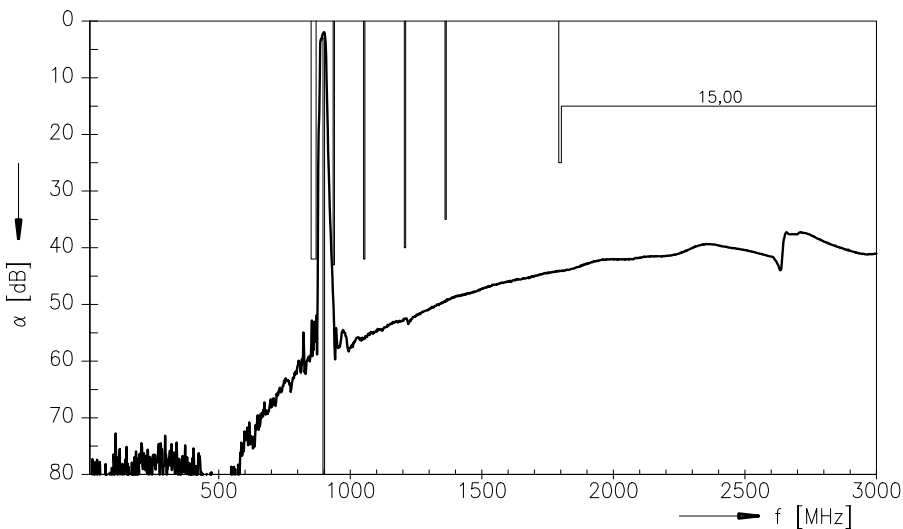
Terminating load impedance:  $Z_L = 50\ \Omega$

|                                      |                 | min. | typ.   | max. |     |
|--------------------------------------|-----------------|------|--------|------|-----|
| <b>Center frequency</b>              | $f_c$           | —    | 899,00 | —    | MHz |
| <b>Maximum insertion attenuation</b> | $\alpha_{\max}$ |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 2,7    | 3,7  | dB  |
| <b>Amplitude ripple (p-p)</b>        | $\Delta\alpha$  |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 0,8    | 1,2  | dB  |
| <b>Group delay ripple (p-p)</b>      | $\Delta\tau$    |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | —    | 10     | 50   | ns  |
| <b>Attenuation</b>                   | $\alpha_{\min}$ |      |        |      |     |
| 851,000 ... 870,000 MHz              |                 | 42   | 46     | —    | dB  |
| 935,000 ... 940,000 MHz              |                 | 43   | 46     | —    | dB  |
| 1050,650 ... 1055,650MHz             |                 | 42   | 54     | —    | dB  |
| 1205,300 ... 1210,300MHz             |                 | 40   | 50     | —    | dB  |
| 1359,950 ...1364,950MHz              |                 | 35   | 46     | —    | dB  |
| 1792,000 ...1802,000 MHz             |                 | 25   | 42     | —    | dB  |
| 1802,000 ...3000,000 MHz             |                 | 15   | 36     | —    | dB  |
| <b>Input return loss</b>             |                 |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | 10   | 16     | —    | dB  |
| <b>Output return loss</b>            |                 |      |        |      |     |
| 896,000 ... 902,000 MHz              |                 | 10   | 15     | —    | dB  |

### Transfer function ( 25+/-2 °C )



### Transfer function ( 25+/-2 °C, Wideband )



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