

# **SAW Components**

Data Sheet B7831





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# **Low-Loss Filter for Mobile Communication**

1765,00 MHz

Chip sized SAW package

**Data Sheet** 

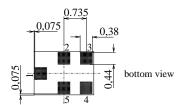


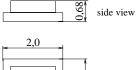
#### **Features**

- Low-loss RF filter for mobile telephone Korean PCS systems, transmit path
- Usable passband 30 MHz
- $\blacksquare$  No matching network required for operation at 50  $\Omega$
- Ceramic package for **S**urface **M**ounted technology (**SMT**)

# **Terminals**

■ Ni, gold-plated





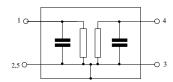
top view

Dimensions in mm, approx. weight 0,007 g

#### Pin configuration

1 Input 4 Output

2,3,5 To be grounded



| Туре  | Ordering code     | Marking and Package | Packing           |  |  |
|-------|-------------------|---------------------|-------------------|--|--|
|       |                   | according to        | according to      |  |  |
| B7831 | B39182-B7831-C710 | C61157-A7-A111      | F61074-V8151-Z000 |  |  |

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

| Operable temperature range | T                | - 30/+ 85        | °C  |             |
|----------------------------|------------------|------------------|-----|-------------|
| Storage temperature range  | $T_{stg}$        | <b>- 40/+ 85</b> | °C  |             |
| DC voltage                 | $V_{\rm DC}$     | 0                | V   |             |
| Input power max.           | $P_{\text{INI}}$ | 10               | dBm | CDMA signal |



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#### Characteristics

Operating temperature range:

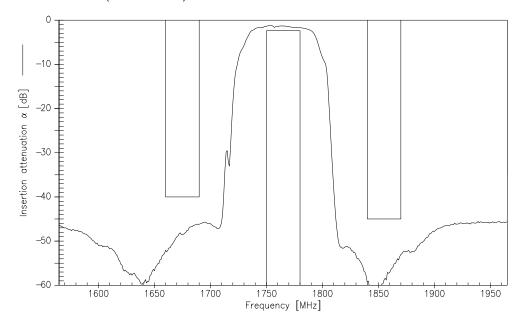
 $T = -30 \text{ to } +85^{\circ}\text{C}$   $Z_{\text{S}} = 50 \Omega$   $Z_{\text{L}} = 50 \Omega$ Terminating source impedance: Terminating load impedance:

|                       |                                      |                                      |                          |                | min.                         | typ.                         | max.             |                      |
|-----------------------|--------------------------------------|--------------------------------------|--------------------------|----------------|------------------------------|------------------------------|------------------|----------------------|
| Center frequency      |                                      |                                      |                          | f <sub>c</sub> | _                            | 1765,0                       | _                | MHz                  |
| Maximum insertion a   |                                      | on<br>1780,0                         | MHz                      | $\alpha_{max}$ | _                            | 1,8                          | 2,4              | dB                   |
| Amplitude ripple (p-p | o)<br>1750,0                         | 1780,0                               | MHz                      | Δα             | _                            | 0,6                          | 1,2              | dB                   |
| VSWR                  | 1750,0                               | 1780,0                               | MHz                      |                | _                            | 1,5                          | 1,9              |                      |
| Attenuation           | 1350,0<br>1660,0<br>1840,0<br>2150,0 | 1380,0<br>1690,0<br>1870,0<br>2180,0 | MHz<br>MHz<br>MHz<br>MHz | α              | 35,0<br>40,0<br>45,0<br>40,0 | 40,0<br>46,0<br>52,0<br>47,0 | _<br>_<br>_<br>_ | dB<br>dB<br>dB<br>dB |

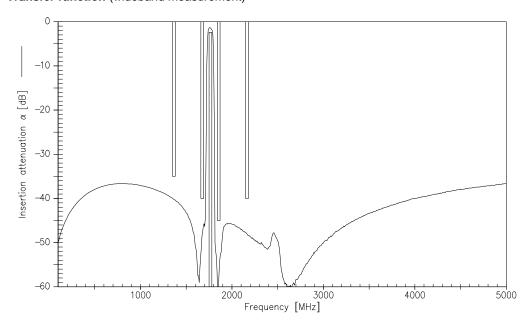




# Transfer function (measurement)



# Transfer function (wideband measurement)





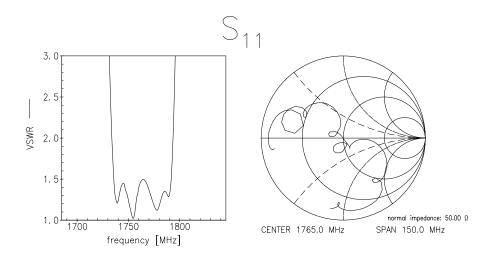
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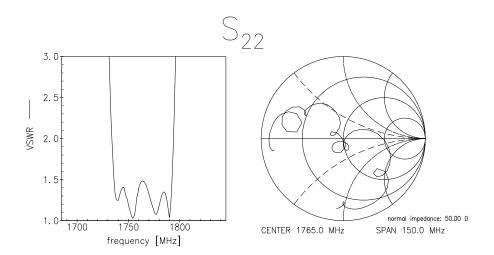
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# Matching (measurement)







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