



SAW Components

Data Sheet B7748





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Low-Loss Filter for Mobile Communication

836,5 MHz

Data Sheet



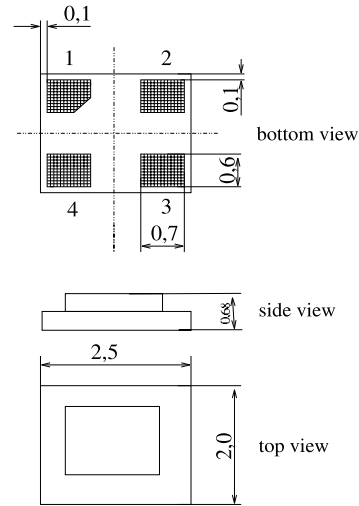
Features

- Low-loss RF filter for cell system, transmit path
- High counterband suppression
- Usable passband 25 MHz
- Unbalanced/unbalanced operation
- Package size: 2 mm x 2.5 mm (4 pin, diagonal pinning)

Terminals

- Ni, gold-plated

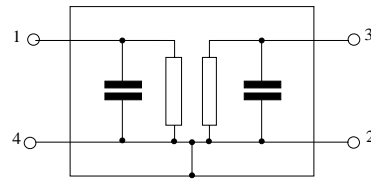
Chip sized SAW package **DCS4E**



Dimensions in mm, approx weight 0,012g

Pin configuration

- 1 Input
- 3 Output
- 2,4 Ground



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B7748 | B39841-B7748-E510 | C61157-A7-A121 | F61074-V8153-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | | |
|----------------------------|-----------|-------------|-----|------------------------------|
| Operable temperature range | T | - 30 / + 85 | °C | |
| Storage temperature range | T_{stg} | - 40 / + 85 | °C | |
| DC voltage | V_{DC} | 3 | V | |
| ESD voltage | V_{ESD} | 50 | V | |
| Source power | P_s | 16 | dBm | source impedance 50 Ω |



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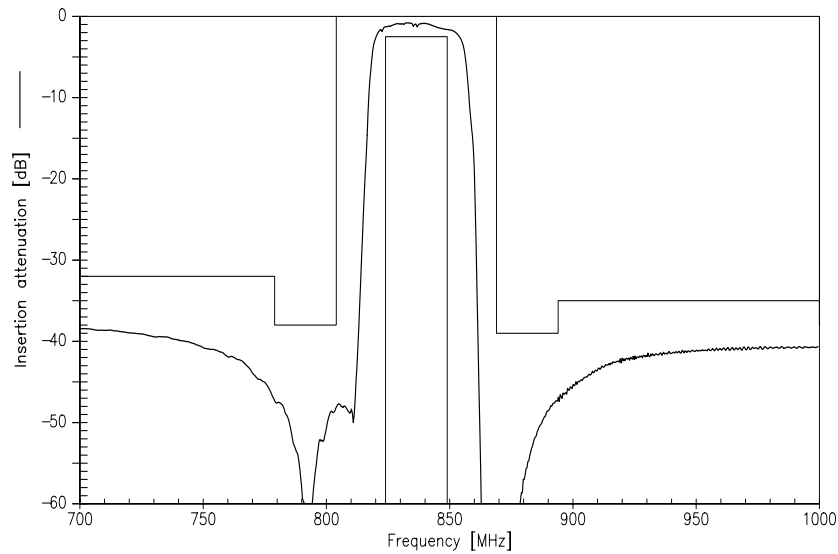
Characteristics

Operating temperature range: $T = -30$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

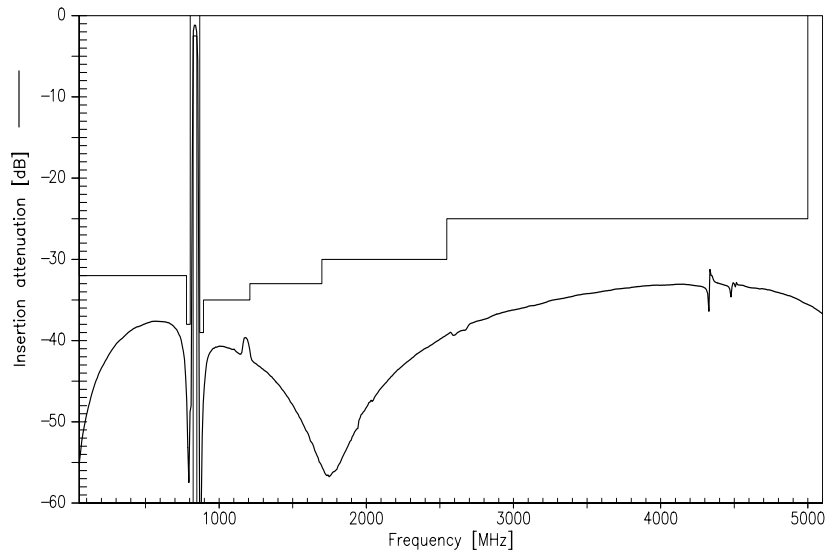
| | | min. | typ. | max. | |
|--------------------------------------|----------------|------|-------|------|-----|
| Center frequency | f_C | — | 836,5 | — | MHz |
| Maximum insertion attenuation | α_{max} | — | 2,0 | 2,5 | dB |
| 824,0 ... 849,0 MHz | | | | | |
| Ripple | p-p | — | 1,3 | 1,7 | dB |
| 824,0 ... 849,0 MHz | | | | | |
| Input return loss @ 50 Ohm | | 11 | 12 | --- | dB |
| 824,0 ... 849,0 MHz | | | | | |
| Output return loss @ 50 Ohm | | 11 | 12 | --- | dB |
| 824,0 ... 849,0 MHz | | | | | |
| Attenuation | α | | | | |
| 0,0 ... 779,0 MHz | | 32 | 37 | — | dB |
| 779,0 ... 804,0 MHz | | 38 | 45 | — | dB |
| 869,0 ... 894,0 MHz | | 39 | 46 | — | dB |
| 894,0 ... 1029,0 MHz | | 35 | 40 | — | dB |
| 1029,0 ... 1209,0 MHz | | 35 | 39 | — | dB |
| 1209,0 ... 1306,0 MHz | | 33 | 39 | — | dB |
| 1306,0 ... 1698,0 MHz | | 33 | 43 | — | dB |
| 1698,0 ... 2547,0 MHz | | 30 | 38 | — | dB |
| 2547,0 ... 5000,0 MHz | | 25 | 30 | — | dB |



Transfer function:



Transfer function (wide band):





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