



SAW Components

Data Sheet B7713, Pb-Free





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B7713

Low-Loss Filter for Mobile Communication

836,5 MHz

Data Sheet



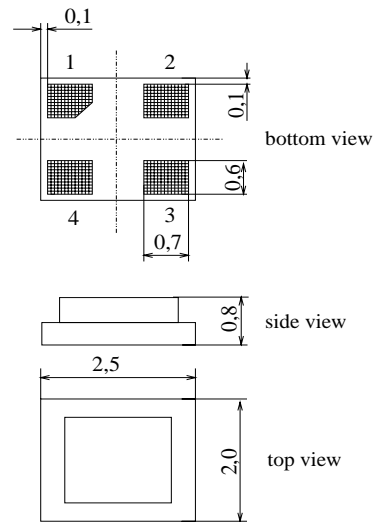
Chip Size SAW Package DCS4H

Features

- Low-loss RF filter for mobile telephone AMPS systems, transmit path
- High Rx rejection
- Usable passband 25 MHz
- Package for Surface Mounted Technology (SMT)
- Pb-Free

Terminals

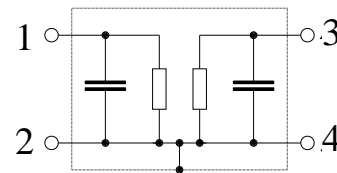
- Gold-plated Ni



Dimensions in mm, approx. weight 0,015 g

Pin configuration

- 1 Input
- 3 Output
- 2, 4 Ground



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B7713 | B39841-B7713-K710 | C61157-A7-A136 | F61074-V8189-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | | |
|-----------------------------|-------------|-----------|-----|--|
| Operating temperature range | T | - 20/+ 70 | °C | Machine Model, 10 pulses source impedance 50 Ω |
| Storage temperature range | T_{stg} | - 40/+ 85 | °C | |
| DC voltage | V_{DC} | 5 | V | |
| ESD voltage | V_{ESD}^* | 100* | V | |
| Input Power max. | P_{IN} | 15 | dBm | |

* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



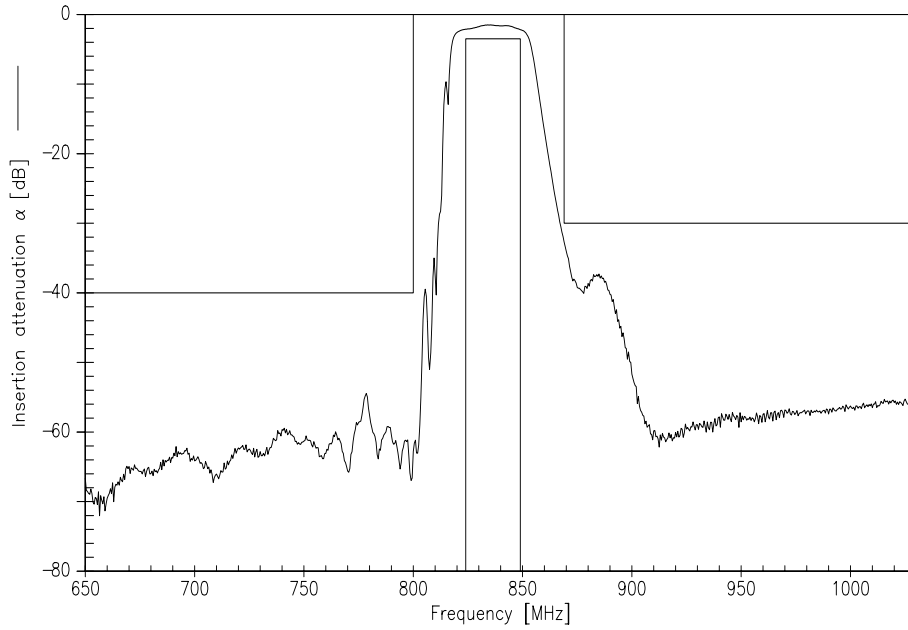
Characteristics

Operating temperature range: $T = -20$ to $+70$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

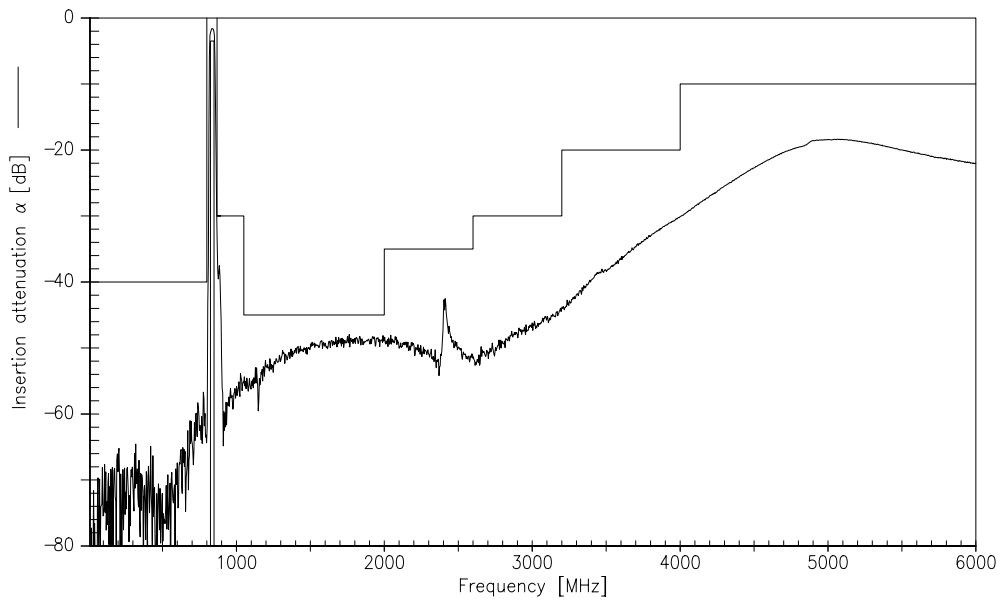
| | | | min. | typ. | max. | |
|--------------------------------------|----------------|-----------------------|------|-------|------|-----|
| Center frequency | f_C | | — | 836,5 | — | MHz |
| Maximum insertion attenuation | α_{max} | | — | 2,5 | 3,5 | dB |
| | | 824,0 ... 849,0 MHz | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | | — | 1,0 | 2,0 | dB |
| | | 824,0 ... 849,0 MHz | | | | |
| Return loss | | | — | 12,0 | 10,0 | dB |
| | | 824,0 ... 849,0 MHz | | | | |
| Attenuation | α | | | | | |
| | | 0,0 ... 800,0 MHz | 40,0 | 50,0 | — | dB |
| | | 869,0 ... 1050,0 MHz | 30,0 | 32,0 | — | dB |
| | | 1050,0 ... 2000,0 MHz | 45,0 | 50,0 | — | dB |
| | | 2000,0 ... 2600,0 MHz | 35,0 | 40,0 | — | dB |
| | | 2600,0 ... 3200,0 MHz | 30,0 | 40,0 | — | dB |
| | | 3200,0 ... 4000,0 MHz | 20,0 | 25,0 | — | dB |
| | | 4000,0 ... 6000,0 MHz | 10,0 | 18,0 | — | dB |



Transfer function



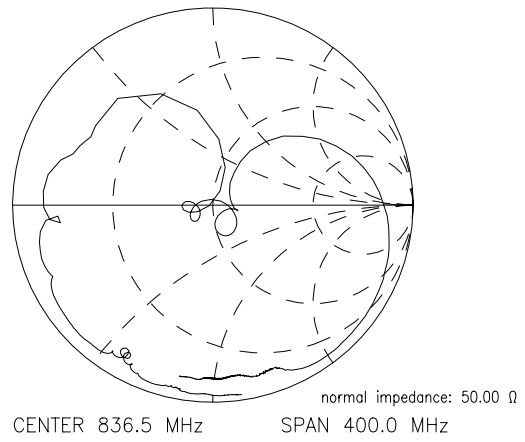
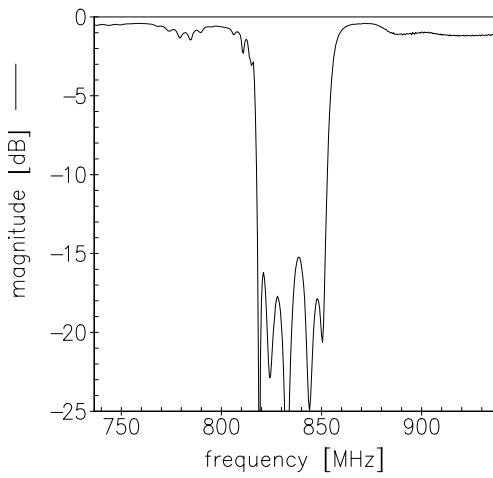
Transfer function (wideband)



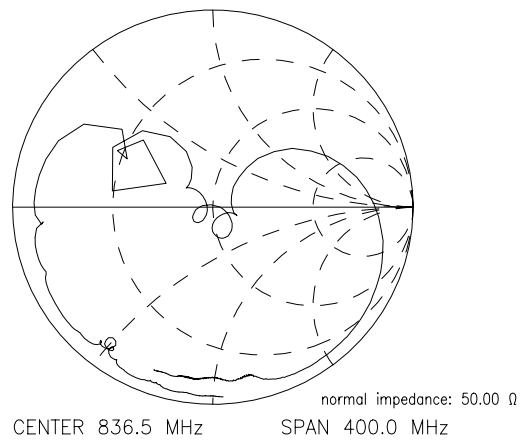
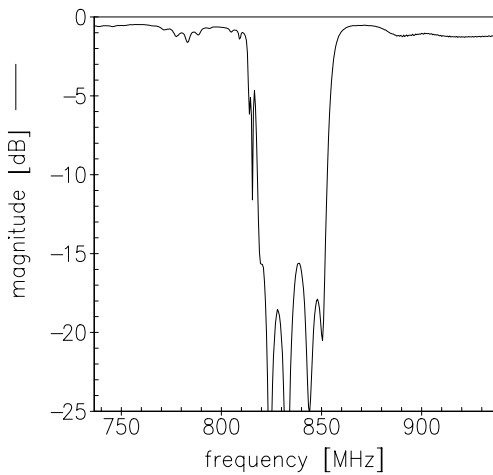


Reflection functions

S_{11}



S_{22}





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