

B4104 942,50 MHz

Data Sheet

Features

- Low-loss RF filter for mobile telephone EGSM system, receive path
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for Surface Mounted Technology (SMT)

0,6 0,6 0,1 1,27 2x1,27=2,54

Ceramic package DCC6

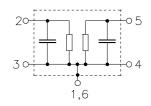
Terminals

Ni, gold-plated

Dimensions in mm, approx. weight 0,07 g

Pin configuration

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



| Туре | Ordering code | Marking and Package | Packing |
|-------|-------------------|---------------------|-------------------|
| | | according to | according to |
| B4104 | B39941-B4104-Z610 | C61157-A7-A41 | F61074-V8030-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| Operable temperature range | T | - 20 / + 80 | °C | |
|----------------------------|--------------|--------------------|-----|---------------------------------------|
| Storage temperature range | T_{stg} | - 40 / + 85 | °C | |
| DC voltage | $V_{\rm DC}$ | 0 | V | |
| Input power max. | | | | source and load impedance 50 Ω |
| 880915 MHz | P_{IN} | 10 | dBm | peak power of GSM signal, |
| | | | | duty cycle 1:8 |
| elsewhere | | 5 | dBm | continuous wave |

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B4104 942,50 MHz

Data Sheet

Characteristics

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

| | | min. | typ. | max. | |
|---|--------------------|------|--------|------|-----|
| Center frequency | $f_{\mathtt{C}}$ | _ | 942,50 | _ | MHz |
| Maximum insertion attenuation | $\alpha_{\sf max}$ | | | | |
| 925,0 960,0 | MHz | _ | 2,3 | 3,0 | dB |
| Amenditude vinale (c. c.) | A o. | | | | |
| Amplitude ripple (p-p) 925,0 960,0 | $\Delta lpha$ MHz | _ | 1,0 | 1,8 | dB |
| ,. | | | , - | ,- | |
| Input Return Loss | MI I- | 10.0 | 44.0 | | 4D |
| 925,0 960,0 | MHz | 10,0 | 11,0 | _ | dB |
| Output Return Loss | | | | | |
| 925,0 960,0 | MHz | 9,0 | 10,0 | _ | dB |
| Attenuation | α | | | | |
| 0,0 880,0 | MHz | 15,0 | 18,0 | _ | dB |
| 880,0 905,0 | MHz | 20,0 | 25,0 | _ | dB |
| 905,0 915,0 | MHz | 20,0 | 25,0 | _ | dB |
| 980,01000,0 | MHz | 20,0 | 27,0 | _ | dB |
| 1000,01300,0 | MHz | 19,0 | 21,0 | _ | dB |
| 1300,01475,0 | MHz | 22,0 | 24,0 | _ | dB |
| 1475,01597,0 | MHz | 26,0 | 29,0 | _ | dB |
| 1597,01710,0 | MHz | 30,0 | 32,0 | _ | dB |
| 1710,02500,0 | MHz | 13,0 | 17,0 | _ | dB |
| 2500,03000,0 | MHz | 5,0 | 12,0 | _ | dB |
| | | | | | |



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Data Sheet

Characteristics

Operating temperature range:

T = +10 to +60° C Z_S = 50 Ω Z_L = 50 Ω Terminating source impedance: Terminating load impedance:

| | | min. | typ. | max. | |
|---|--------------------|------|--------|------|-----|
| Center frequency | f _C | _ | 942,50 | _ | MHz |
| Maximum insertion attenuation | $\alpha_{\sf max}$ | | | | |
| | Hz | _ | 2,4 | 3,3 | dB |
| Amplitude vinnle (n. n.) | A or | | | | |
| Amplitude ripple (p-p) 925,0 960,0 M | $\Delta lpha$ Hz | _ | 1,1 | 2,1 | dB |
| | | | · | , | |
| Input Return Loss | | 10.0 | 11.0 | | dD. |
| 925,0 960,0 M | Hz | 10,0 | 11,0 | _ | dB |
| Output Return Loss | | | | | |
| 925,0 960,0 M | Hz | 9,0 | 10,0 | _ | dB |
| Attenuation | α | | | | |
| | Hz | 15,0 | 18,0 | _ | dB |
| 880,0 905,0 M | Hz | 20,0 | 25,0 | _ | dB |
| 905,0 915,0 M | Hz | 13,0 | 24,0 | _ | dB |
| 980,01000,0 M | Hz | 20,0 | 27,0 | _ | dB |
| 1000,01300,0 M | Hz | 19,0 | 21,0 | _ | dB |
| 1300,01475,0 M | Hz | 22,0 | 24,0 | _ | dB |
| 1475,01597,0 M | Hz | 26,0 | 29,0 | _ | dB |
| 1597,01710,0 M | Hz | 30,0 | 32,0 | _ | dB |
| 1710,02500,0 M | Hz | 13,0 | 17,0 | _ | dB |
| 2500,03000,0 M | Hz | 5,0 | 12,0 | _ | dB |
| | | | | | |



B4104 942,50 MHz

Data Sheet

Characteristics

T = -10 to +80° C Z_S = 50 Ω Z_L = 50 Ω Operating temperature range:

Terminating source impedance: Terminating load impedance:

| | | min. | typ. | max. | |
|-------------------------------|--------------------|------|--------|------|-----|
| Center frequency | f _C | _ | 942,50 | _ | MHz |
| | | | | | |
| Maximum insertion attenuation | $lpha_{\sf max}$. | | | | |
| 925,0 960,0 MF | iz | _ | 2,5 | 3,5 | dB |
| Amplitude ripple (p-p) | Δα | | | | |
| 925,0 960,0 MF | | _ | 1,2 | 2,3 | dB |
| 320,0 300,0 IVII | 12 | | 1,2 | 2,0 | ub |
| Input Return Loss | | | | | |
| 925,0 960,0 MF | łz | 10,0 | 11,0 | _ | dB |
| | | | | | |
| Output Return Loss | | | | | |
| 925,0 960,0 MF | łz | 9,0 | 10,0 | _ | dB |
| | | | | | |
| Attenuation | α | | | | |
| 0,0 880,0 MF | | 15,0 | 18,0 | _ | dB |
| 880,0 905,0 MF | | 20,0 | 25,0 | _ | dB |
| 905,0 915,0 MF | | 12,0 | 22,0 | | dB |
| 980,01000,0 MH | | 20,0 | 27,0 | _ | dB |
| 1000,01300,0 MF | łz | 19,0 | 21,0 | _ | dB |
| 1300,01475,0 MF | łz | 22,0 | 24,0 | _ | dB |
| 1475,01597,0 MF | łz | 26,0 | 29,0 | _ | dB |
| 1597,01710,0 MF | łz | 30,0 | 32,0 | _ | dB |
| 1710,02500,0 MF | łz | 13,0 | 17,0 | _ | dB |
| 2500,03000,0 MF | łz | 5,0 | 12,0 | _ | dB |
| | | | | | |



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Data Sheet

Characteristics

Operating temperature range:

T = -20 to +80° C Z_S = 50 Ω Z_L = 50 Ω Terminating source impedance: Terminating load impedance:

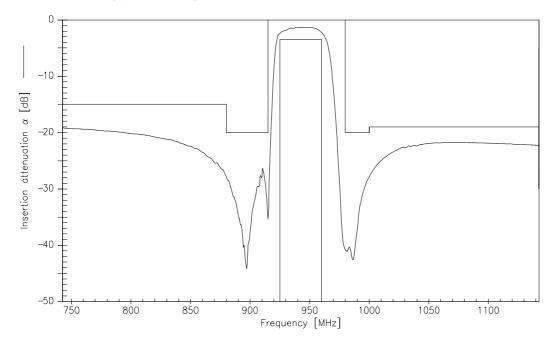
| | | min. | typ. | max. | |
|--------------------------------|----------------|------|--------|------|-----|
| Center frequency | f_{C} | _ | 942,50 | _ | MHz |
| | | | | | |
| Maximum insertion attenuation | α _m | nax | 0.7 | 2.7 | 4D |
| 925,0 960,0 | MHz | _ | 2,7 | 3,7 | dB |
| Amplitude ripple (p-p) | Δα | : | | | |
| 925,0 960,0 | MHz | _ | 1,4 | 2,5 | dB |
| | | | | | |
| Input Return Loss | | | | | |
| 925,0 960,0 | MHz | 10,0 | 11,0 | _ | dB |
| Outroot Between Lane | | | | | |
| Output Return Loss 925,0 960,0 | MHz | 9,0 | 10,0 | | dB |
| 925,0 960,0 | IVITZ | 9,0 | 10,0 | _ | ub |
| Attenuation | α | | | | |
| 0,0 880,0 | MHz | 15,0 | 18,0 | _ | dB |
| 880,0 905,0 | MHz | 20,0 | 25,0 | _ | dB |
| 905,0 915,0 | MHz | 9,0 | 20,0 | _ | dB |
| 980,01000,0 | MHz | 20,0 | 27,0 | _ | dB |
| 1000,01300,0 | MHz | 19,0 | 21,0 | _ | dB |
| 1300,01475,0 | MHz | 22,0 | 24,0 | _ | dB |
| 1475,01597,0 | MHz | 26,0 | 29,0 | _ | dB |
| 1597,01710,0 | MHz | 30,0 | 32,0 | _ | dB |
| 1710,02500,0 | MHz | 13,0 | 17,0 | _ | dB |
| 2500,03000,0 | MHz | 5,0 | 12,0 | _ | dB |
| | | | | | |



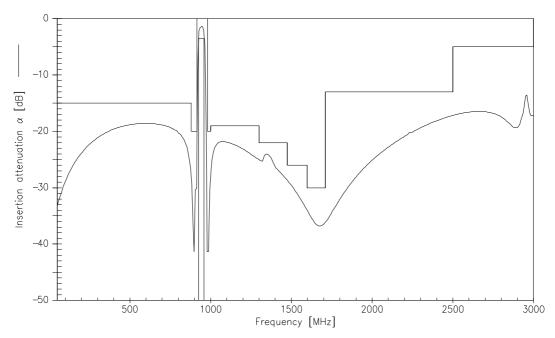
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Data Sheet

Transfer function (spec for 25°C)



Transfer function (wideband)



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