

Data Sheet B4134





B4134

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

947,5 MHz

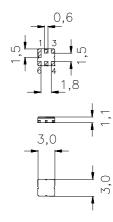
**Data Sheet** 



Ceramic package DCC6D

#### **Features**

- Low-loss RF filter for GSM mobile telephone system, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- $\blacksquare$  Impedance transformation from 50  $\Omega$  to 200  $\Omega$
- Unbalanced to balanced transformation
- Ceramic package for Surface Mounted Technology (SMT)



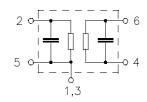
#### **Terminals**

■ Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

## Pin configuration

2	Input, unbalanced
4, 6	Balanced outputs
1, 3, 5	To be grounded
1, 3, 5	Case ground



Туре	Ordering code	Marking and Package according to	Packing according to
B4134	B39951-B4134-U510	C61157-A7-A68	F61074-V8089-Z000

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

Operable temperature range	T	- 10 / + 80	°C	
Storage temperature range	$T_{stg}$	<b>- 40 / + 85</b>	°C	
DC voltage	$V_{\rm DC}$	5	V	
Input power max. 890 915 MHz	$P_{IN}$	15	dBm	source and load impedance 50 Ω peak power of GSM signal, duty cycle 1 : 8
elsewhere		0	dBm	continuous wave



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#### **Characteristics**

 $T = 25 + -2 \,^{\circ}\text{C}$   $Z_{\text{S}} = 50 \,\Omega$   $Z_{\text{L}} = 200 \,\Omega \parallel 70 \,\text{nH}$ Operating temperature range: Terminating source impedance:

Terminating load impedance:

				min.	typ.	max.	
Center frequency			$f_{\mathbb{C}}$	_	947,5	_	MHz
Maximum insertion attenuation 935,0 960,0 MHz		$\alpha_{\text{max}}$	_	2,5	3,0	dB	
Amplitude ripple (p-p)	960,0	MHz	Δα	_	0,7	1,2	dB
Attenuation			α			.,_	
•	600,0	MHz MHz		60 55	80 70	_	dB dB
980,0 1050,0	,	MHz MHz MHz		32 23 50	36 26 60	_	dB dB dB
1700,0 2500,0	2500,0	MHz MHz		45 35	60 50		dB dB
3500,0 4500,0	4500,0	MHz MHz		20 15	30 25	_ _	dB dB



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#### **Characteristics**

Operating temperature range:

Terminating source impedance:

 $T = -10 \text{ to} + 80^{\circ} \text{C}$   $Z_{\text{S}} = 50 \Omega$   $Z_{\text{L}} = 200 \Omega \parallel 70 \text{ nH}$ Terminating load impedance:

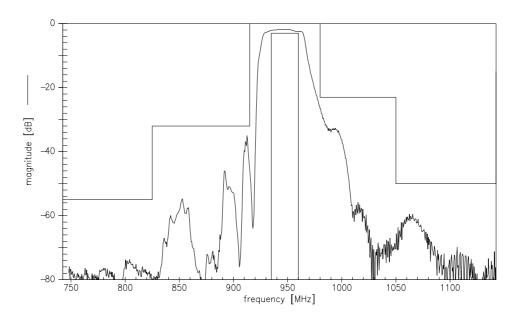
				min.	typ.	max.	
Center frequency			$f_{\mathbb{C}}$	_	947,5	_	MHz
Maximum insertion attenuation 935,0	on 960,0	MHz	$\alpha_{\text{max}}$	_	2,5	3,2	dB
Amplitude ripple (p-p) 935,0	960,0	MHz	Δα	_	0,8	1,4	dB
Attenuation			α				
0,0	600,0	MHz		60	80	_	dB
600,0	825,0	MHz		55	70	_	dB
825,0	915,0	MHz		32	36	_	dB
980,0	1050,0	MHz		22	25	_	dB
1050,0	1700,0	MHz		50	60	_	dB
1700,0	2500,0	MHz		45	60		dB
2500,0	3500,0	MHz		35	50		dB
3500,0	4500,0	MHz		20	30	_	dB
4500,0	5000,0	MHz		15	25	_	dB



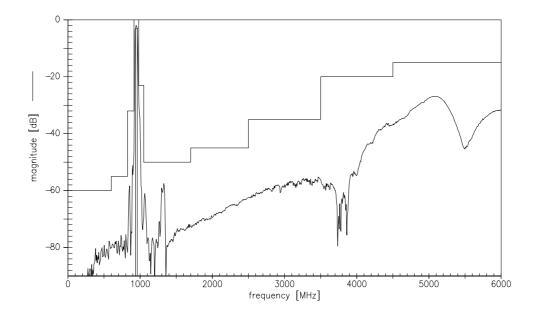
SAW Components B4134
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#### **Transfer function**



# Transfer function (wide band)





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