



Siemens Matsushita Components

# SAW Components

## Low Loss Filter for Mobile Communication

**B4686**  
**947,50 MHz**

### Data Sheet

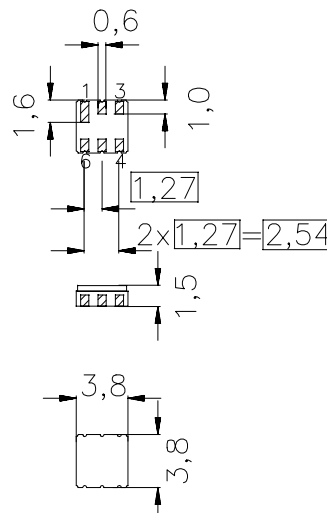
#### Features

- Low-loss RF filter for mobile telephone GSM system, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- No matching network required for operation at 50  $\Omega$
- Ceramic Package for **Surface Mounted Technology (SMT)**

#### Terminals

- Ni, gold-plated

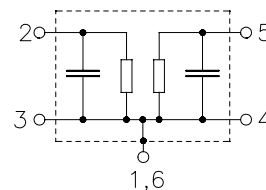
Ceramic package DCC6



Dimensions in mm, approx. weight 0,07 g

#### Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4686	B39951-B4686-Z610	C61157-A7-A41	F61074-V8030-Z000

Electrostatic Sensitive Device (ESD)

#### Maximum ratings

Operable temperature range	$T$	- 20 / + 80	$^{\circ}\text{C}$	
Storage temperature range	$T_{\text{stg}}$	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	$V_{\text{DC}}$	0	V	
Source power	$P_s$	10	dBm	source impedance 50 $\Omega$



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#### Characteristics

Operating temperature range:  $T = -20$  to  $+80^{\circ}\text{C}$   
Terminating source impedance:  $Z_S = 50\ \Omega$   
Terminating load impedance:  $Z_L = 50\ \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	947,50	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
	935,0 ... 960,0 MHz		—	1,6	2,0	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
	935,0 ... 960,0 MHz		—	0,6	1,0	dB
<b>Input Return Loss</b>						
	935,0 ... 960,0 MHz		10,0	14,0	—	dB
<b>Output Return Loss</b>						
	935,0 ... 960,0 MHz		10,0	13,0	—	dB
<b>Attenuation</b>	$\alpha$					
	0,0 ... 890,0 MHz		15,0	18,0	—	dB
	890,0 ... 915,0 MHz		20,0	24,0	—	dB
	980,0 ... 1000,0 MHz		15,0	27,0	—	dB
	1000,0 ... 1300,0 MHz		19,0	21,0	—	dB
	1300,0 ... 1475,0 MHz		22,0	24,0	—	dB
	1475,0 ... 1550,0 MHz		26,0	29,0	—	dB
	1550,0 ... 2500,0 MHz		13,0	17,0	—	dB



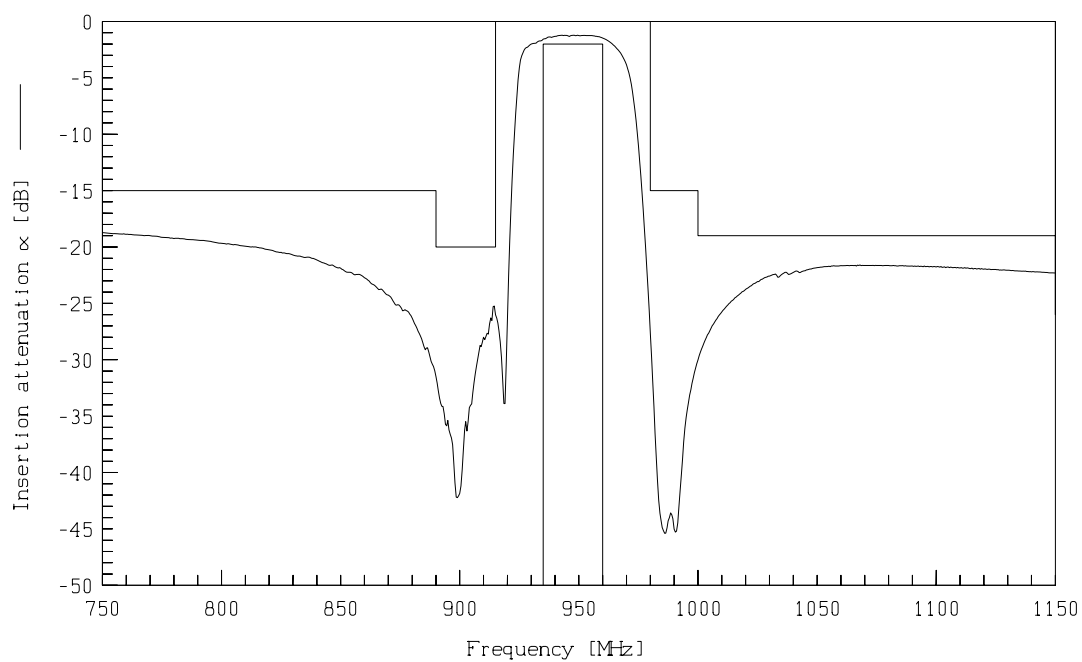
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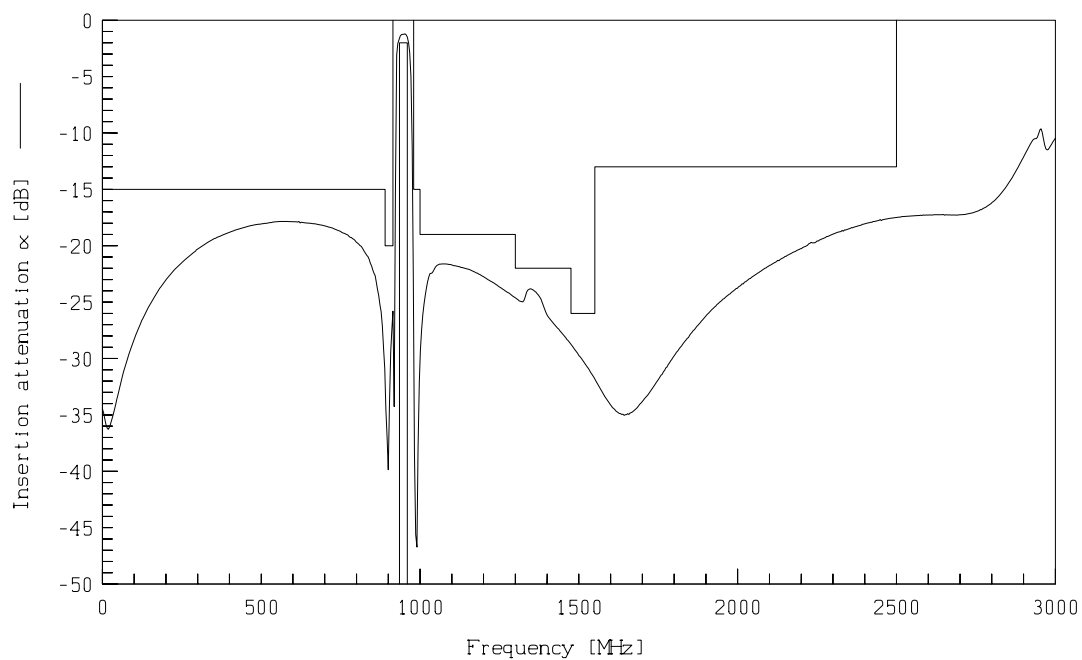
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### Data Sheet

#### Transfer function



#### Transfer function (wideband)





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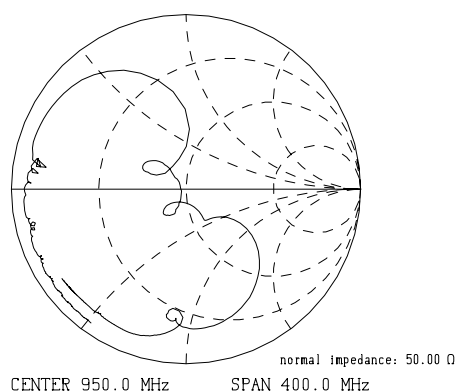
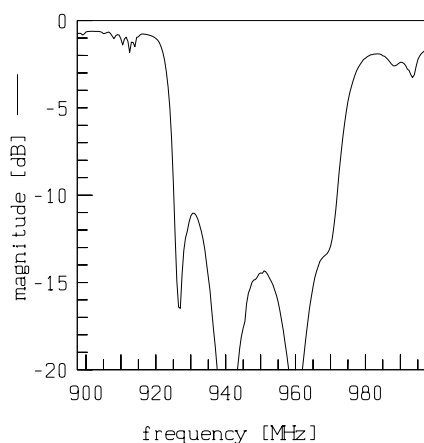
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### Data Sheet

### Reflection functions

S11



S22

