



Siemens Matsushita Components

SAW Components Low Loss Filter for Mobile Communication

B4686
947,50 MHz

Data Sheet

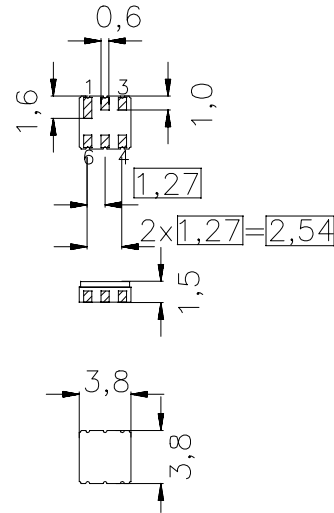
Features

- 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 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**

Terminals

- Ni, gold-plated

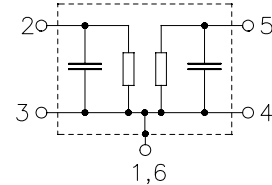
Ceramic package DCC6



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	°C	source impedance 50 Ω
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	



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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.	
Center frequency		f_c		—	947,50	—	MHz
Maximum insertion attenuation	935,0 ... 960,0	MHz	α_{max}	—	1,6	2,0	dB
Amplitude ripple (p-p)	935,0 ... 960,0	MHz	$\Delta\alpha$	—	0,6	1,0	dB
Input Return Loss	935,0 ... 960,0	MHz		10,0	14,0	—	dB
Output Return Loss	935,0 ... 960,0	MHz		10,0	13,0	—	dB
Attenuation			α				
	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



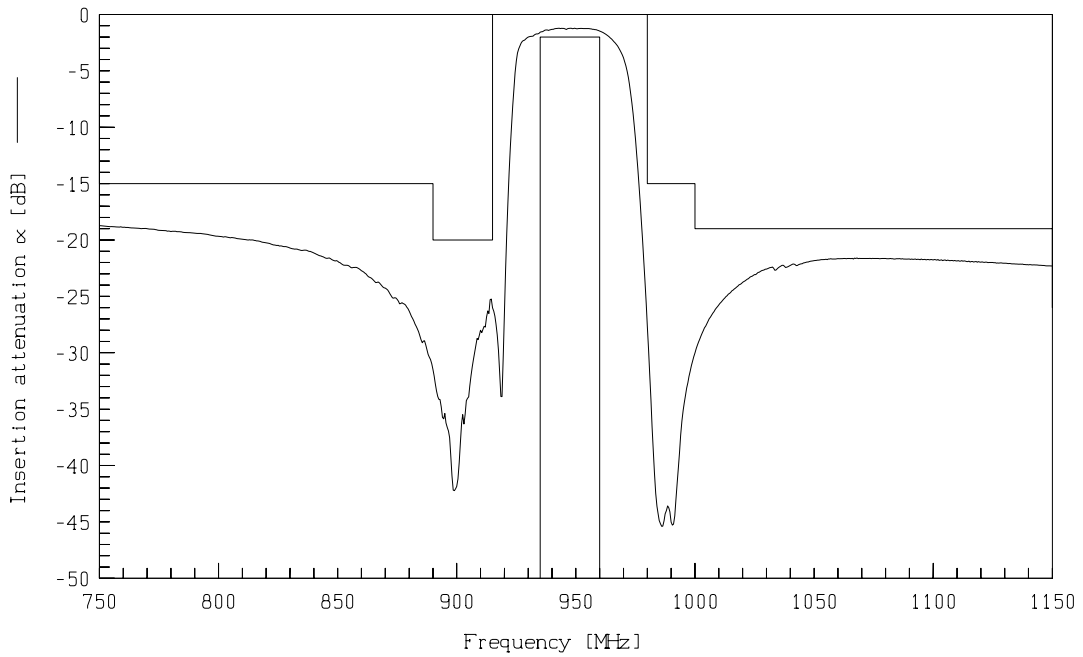
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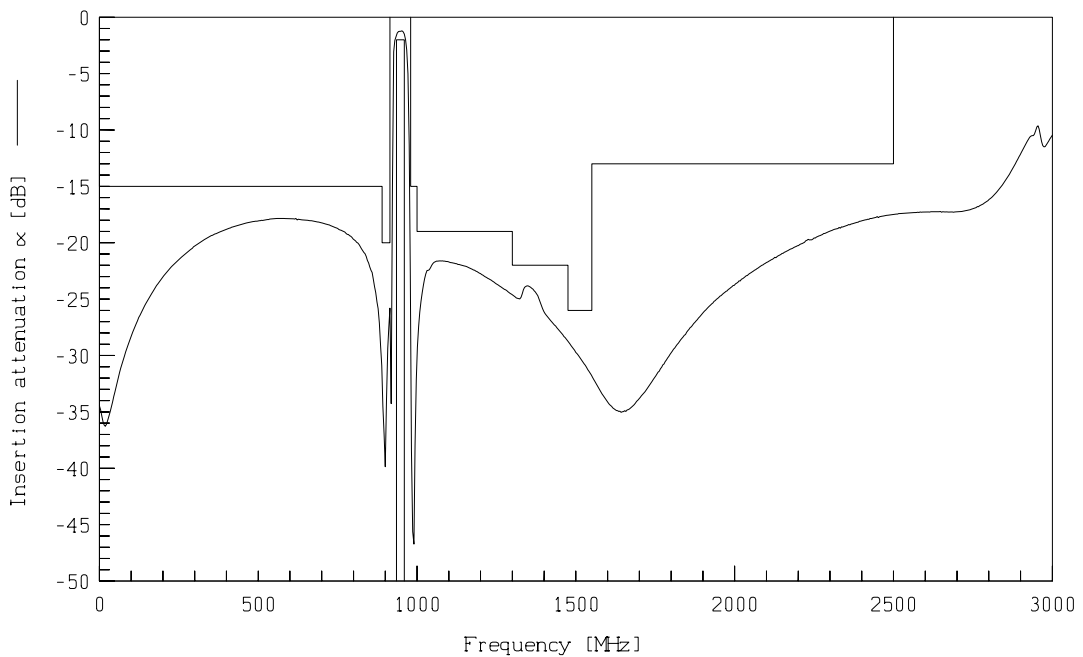
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Transfer function



Transfer function (wideband)





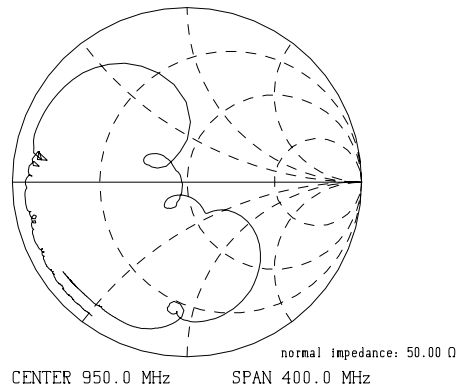
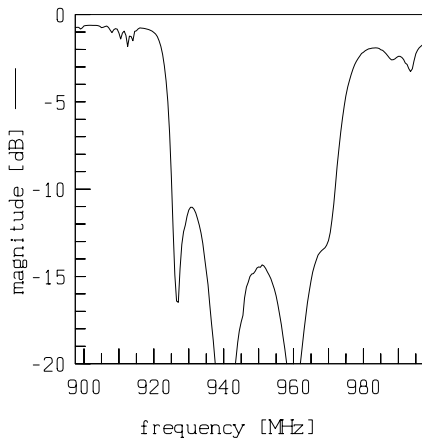
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Reflection functions

S11



S22

