



SAW Components

Data Sheet B7733

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a bright, circular highlight in the center of each, giving them a three-dimensional appearance. They are set against a dark, textured background. In the background, there is a faint, stylized globe and a wavy, metallic-looking shape that resembles a sound wave or a stylized letter 'S'.



SAW Components

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Low-Loss Filter for Mobile Communication

881,5 MHz

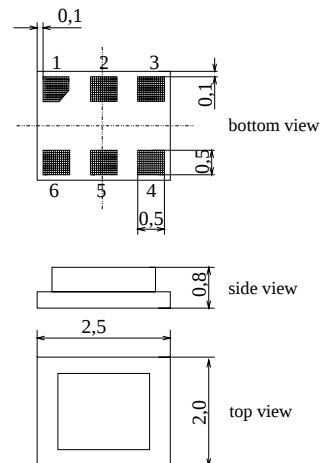
Data Sheet



Features

- Low-loss RF filter for mobile telephone cellular system, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50 Ω to 100 Ω
- Package for Surface Mounted Technology (SMT)

Chip Size SAW package DCS6I



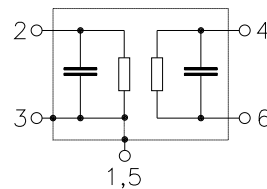
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,014g

Pin configuration

- | | |
|-------|------------------------|
| 2 | Input |
| 4 | Balanced output |
| 6 | Balanced output |
| 1,3,5 | Ground, to be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B7733	B39881-B7733-C610	C61157-A7-A76	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40 / + 85	$^{\circ}\text{C}$	source impedance 50 Ω CDMA signal
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
Input power max.	P_{IN}	0	dBm	



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Characteristics

Operating temperature range: $T = -30$ to $+85$ °C
Terminating source impedance: $Z_S = 50 \Omega$ (unbalanced)
Terminating load impedance: $Z_L = 100 \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
869,0 ... 894,0 MHz		—	2,7	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	1,2	1,5	dB
Input VSWR					
869,0 ... 894,0 MHz		—	2,0	2,1	
Output VSWR					
869,0 ... 894,0 MHz		—	2,0	2,1	
Output amplitude imbalance (S_{31}/S_{21})					
869,0 ... 894,0 MHz		-1,5	—	2,0	dB
Output phase imbalance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
869,0 ... 894,0 MHz		-5,0	—	7,0	degree
Attenuation	α				
0,0 ... 824,0 MHz		46,0	53,0	—	dB
824,0 ... 849,0 MHz		34,0	41,0	—	dB
915,0 ... 1000,0 MHz		25,0	30,0	—	dB
1000,0 ... 2000,0 MHz		35,0	47,0	—	dB
2000,0 ... 3000,0 MHz		30,0	40,0	—	dB



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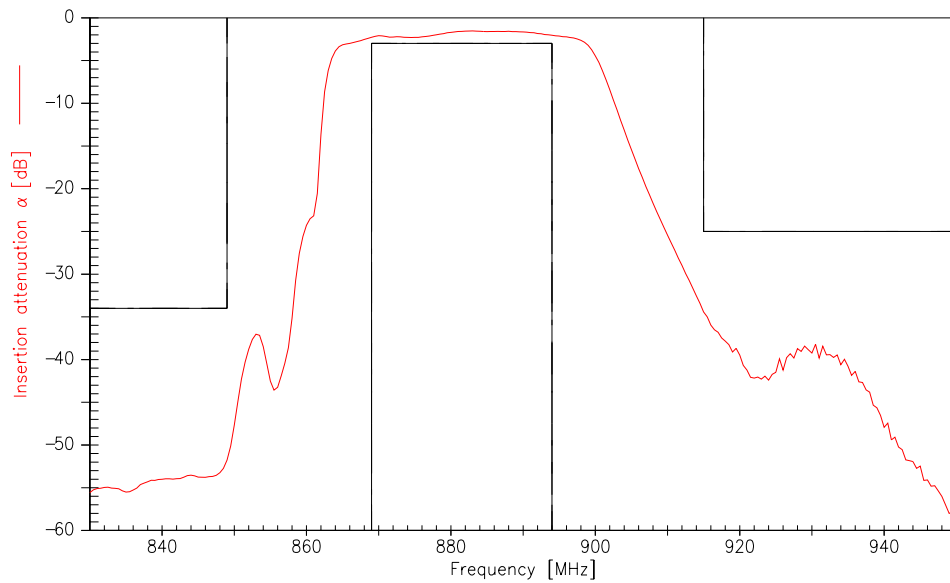
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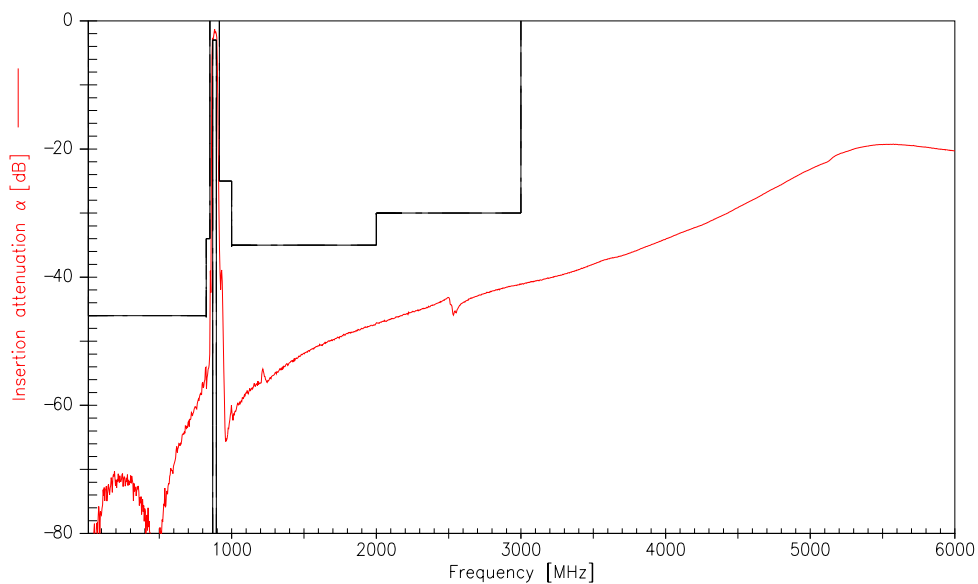
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Transfer function



Transfer function (wideband)





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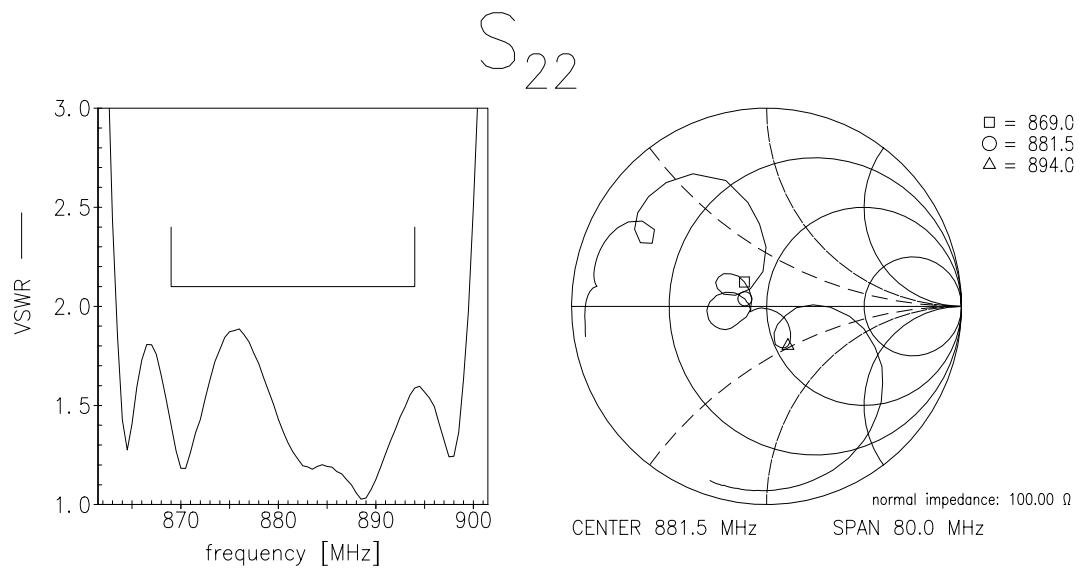
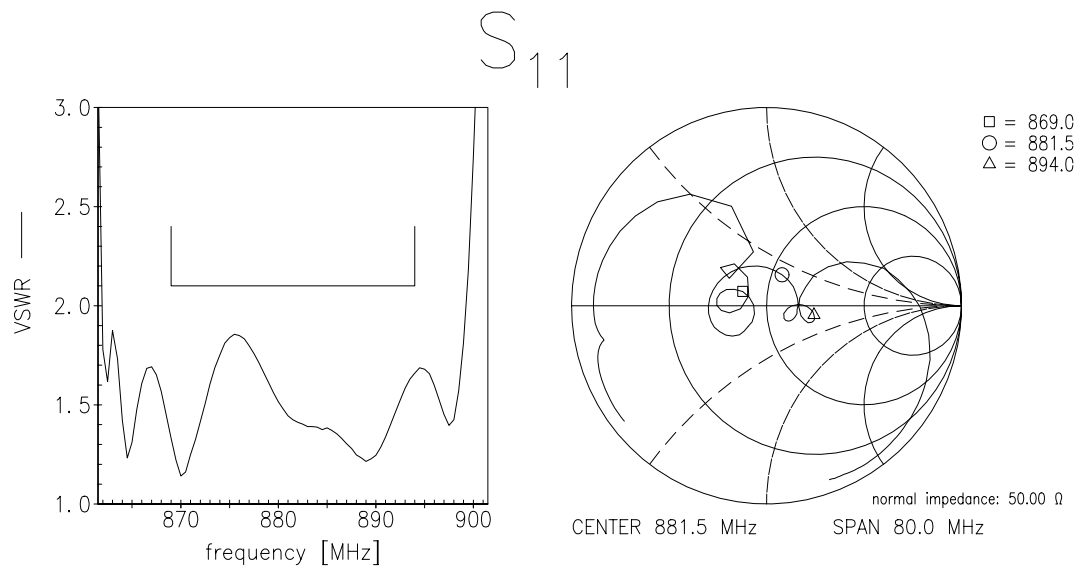
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Reflection functions





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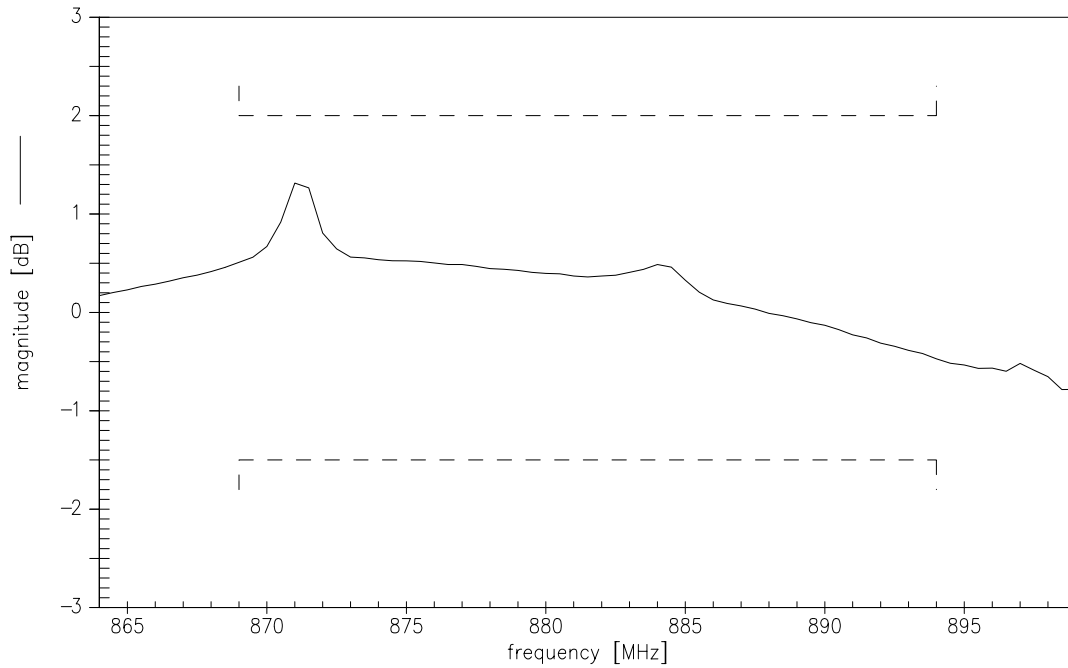
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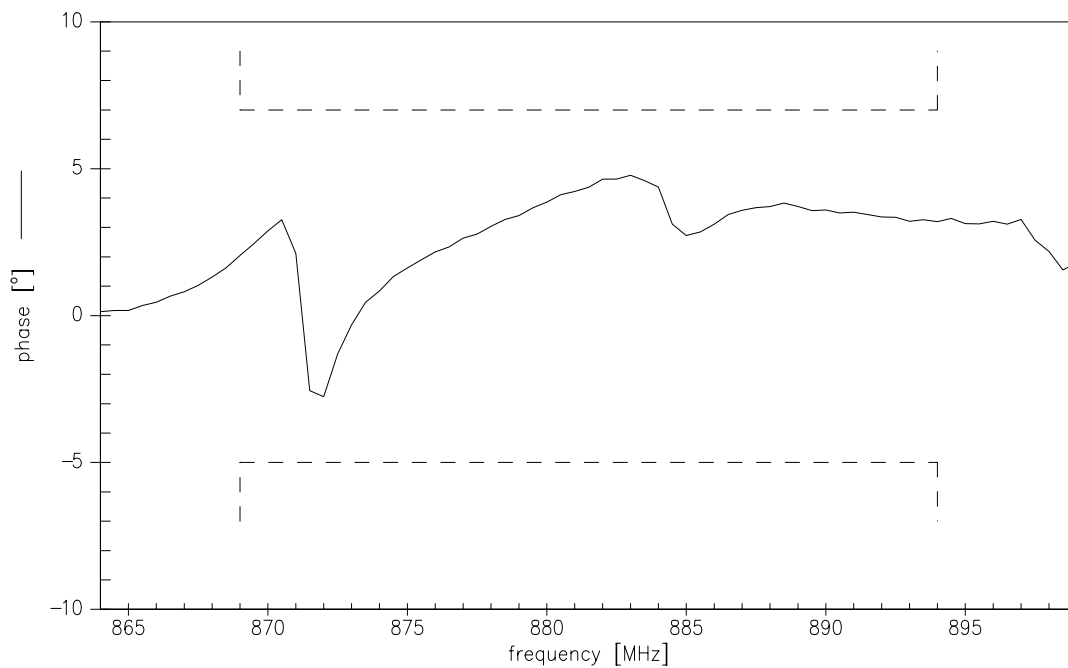
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Output amplitude balance ($|S_{31}|/|S_{21}|$)



Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)





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