



SAW Components

Data Sheet B7764

Data Sheet

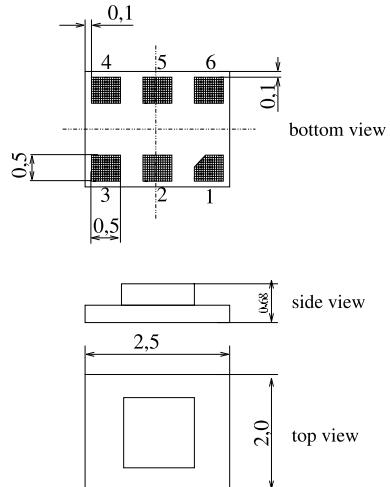
SAW Components
B7764
Low-Loss Filter for Mobile Communication
897,50 MHz
Data Sheet

Chip Sized SAW Package DCS6P
Features

- Low-loss RF filter for mobile telephone EGSM system, transmit path
- Low amplitude ripple
- Usable passband 35 MHz
- Balanced to unbalanced operation
- Impedance transformation from 100Ω to 50Ω
- Suitable for GPRS class 1 to 12
- Package for **Surface Mounted Technology (SMT)**

Terminals

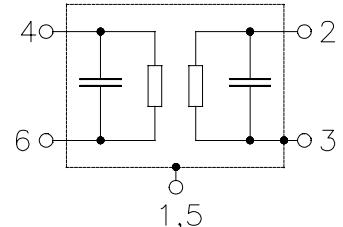
- Ni, gold-plated



Dimensions in mm, approx. weight 0,010 g

Pin configuration

4	Balanced input
6	Balanced input
2	Output
1,3, 5	Ground, to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7764	B39901-B7764-E410	C61157-A7-A101	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)
Maximum ratings

Operable temperature range	T	$-30 / +85$	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	$-40 / +85$	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{MM}	100	V	machine model
	V_{HBM}	250	V	human body model
Input power at				
GSM850, GSM900 Tx bands	P_{in}	15	dBm	peak power of GSM signal, duty cycle 4:8
GSM1800, GSM1900 Tx bands		15		

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**Characteristics**

Operating temperature range:

 $T = -10 \dots +75 \text{ }^{\circ}\text{C}$

Terminating source impedance:

 $Z_S = 100 \Omega \parallel 33 \text{ nH (balanced)}$

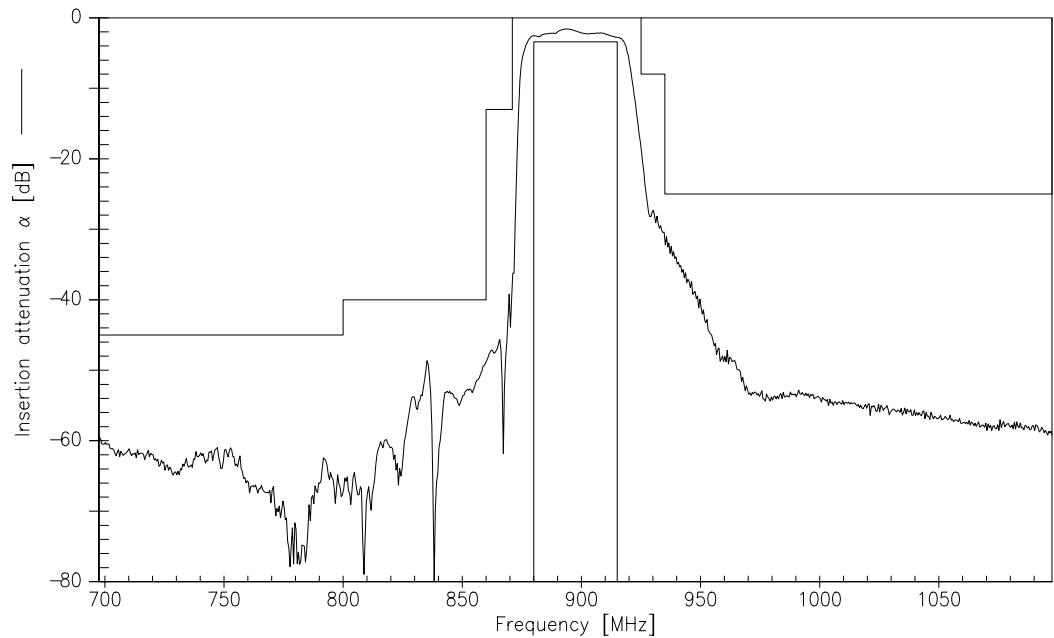
Terminating load impedance:

 $Z_L = 50 \Omega$

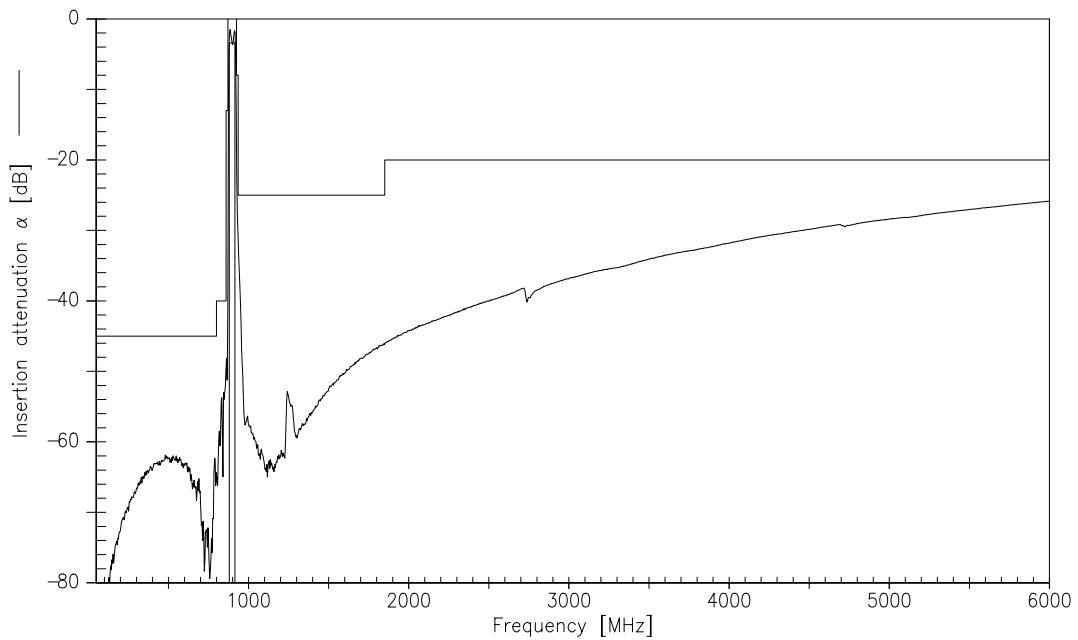
			min.	typ.	max.	
Nominal frequency		f_N	—	897,5	—	MHz
Maximum insertion attenuation		α_{\max}	—	2,9	3,4*	dB
	880,0 ... 915,0	MHz				
Amplitude ripple (p-p)		$\Delta\alpha$	—	1,3	1,9	dB
	880,0 ... 915,0	MHz				
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)			-10	0	10	°
	880,0 ... 915,0	MHz				
Output amplitude balance (S_{31}/S_{21})			-0,8	0,2	1,2	dB
	880,0 ... 915,0	MHz				
Input VSWR			—	1,8	2,1	
	880,0 ... 915,0	MHz				
Output VSWR			—	2,0	2,2	
	880,0 ... 915,0	MHz				
Attenuation		α				
	0,0 ... 800,0	MHz	45	58	—	dB
	800,0 ... 860,0	MHz	40	46	—	dB
	860,0 ... 870,0	MHz	13	23	—	dB
	925,0 ... 935,0	MHz	8	15	—	dB
	935,0 ... 1850,0	MHz	25	35	—	dB
	1850,0 ... 6000,0	MHz	20	25	—	dB

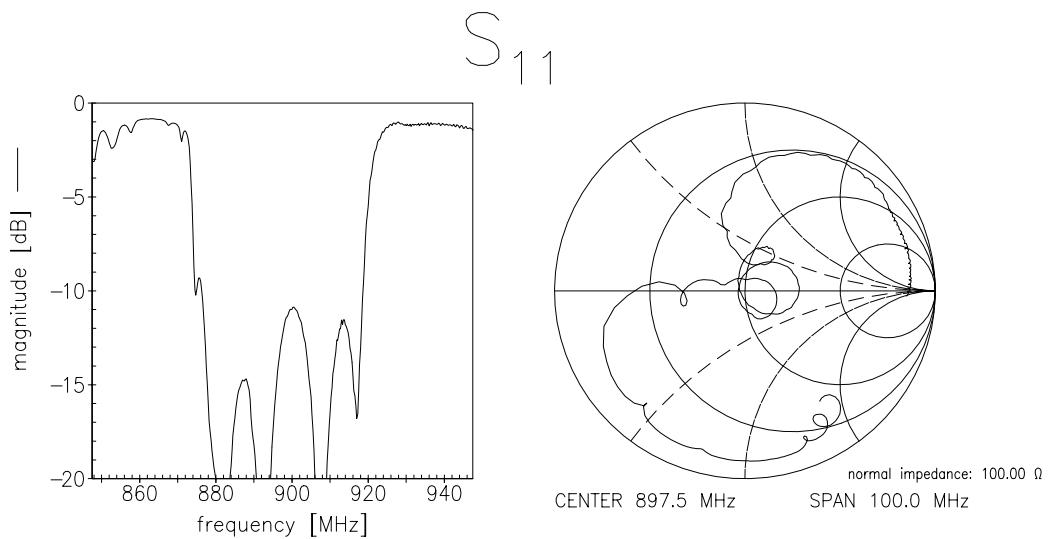
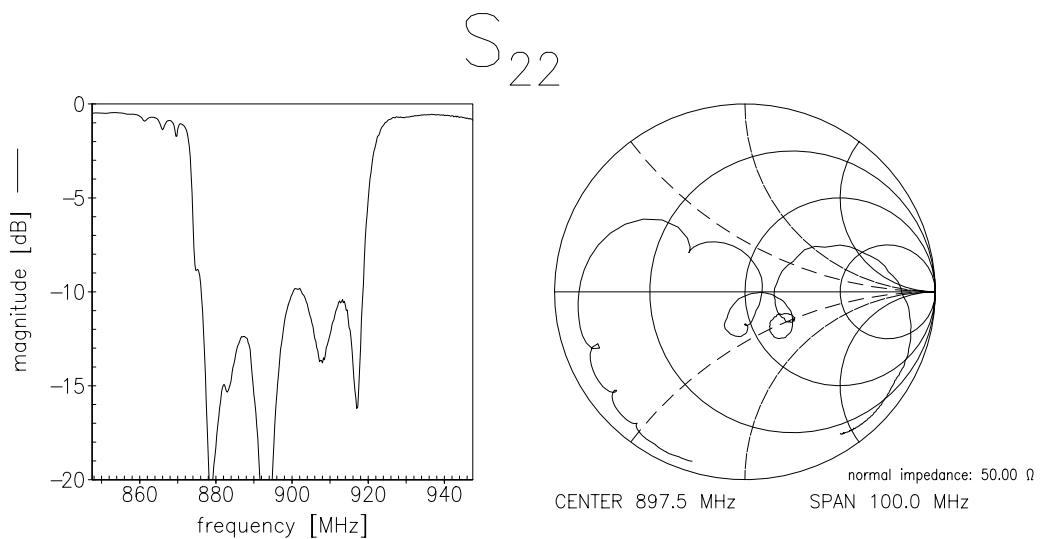
* 6,5 dB for $T = -30 \text{ to } +85 \text{ }^{\circ}\text{C}$

Transfer function



Transfer function (wideband measurement)







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