



SAW Components

Data Sheet B7764





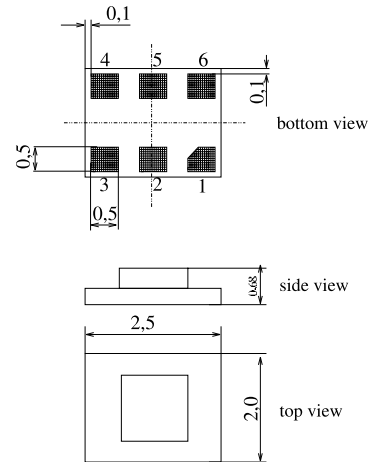
Chip Sized SAW Package DCS6P

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 100 Ω to 50 Ω
- Suitable for GPRS class 1 to 12
- Package for **Surface Mounted Technology (SMT)**

Terminals

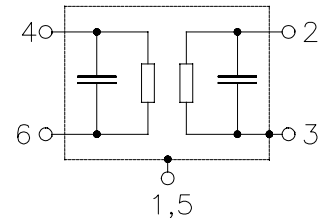
- Ni, gold-plated



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



Characteristics

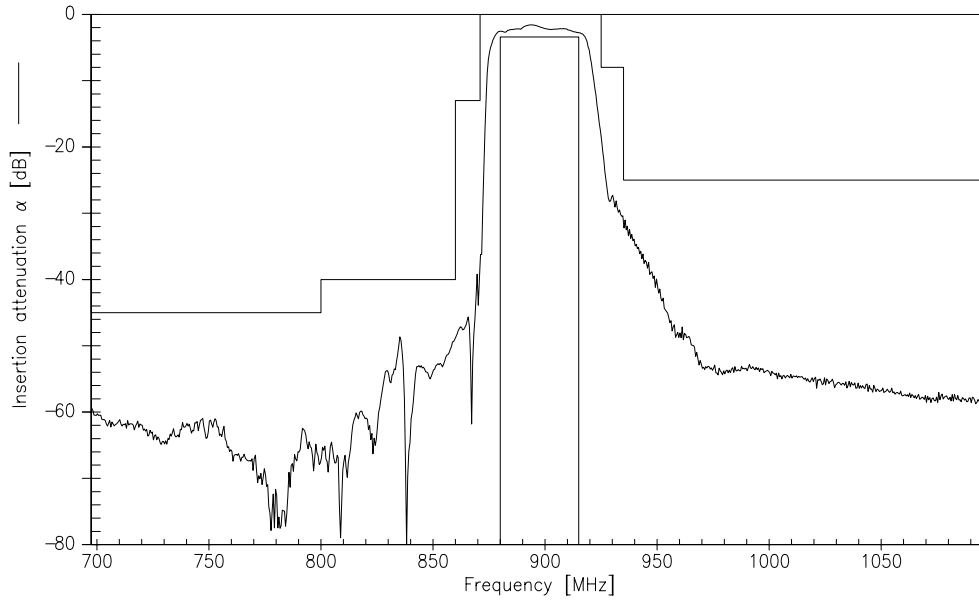
Operating temperature range: $T = -10 \dots +75 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 100 \text{ } \Omega \parallel 33 \text{ nH (balanced)}$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	897,5	—	MHz
Maximum insertion attenuation	α_{\max}				
	880,0 ... 915,0 MHz	—	2,9	3,4*	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	880,0 ... 915,0 MHz	—	1,3	1,9	dB
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
	880,0 ... 915,0 MHz	-10	0	10	°
Output amplitude balance ($ S_{31}/S_{21} $)					
	880,0 ... 915,0 MHz	-0,8	0,2	1,2	dB
Input VSWR					
	880,0 ... 915,0 MHz	—	1,8	2,1	
Output VSWR					
	880,0 ... 915,0 MHz	—	2,0	2,2	
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

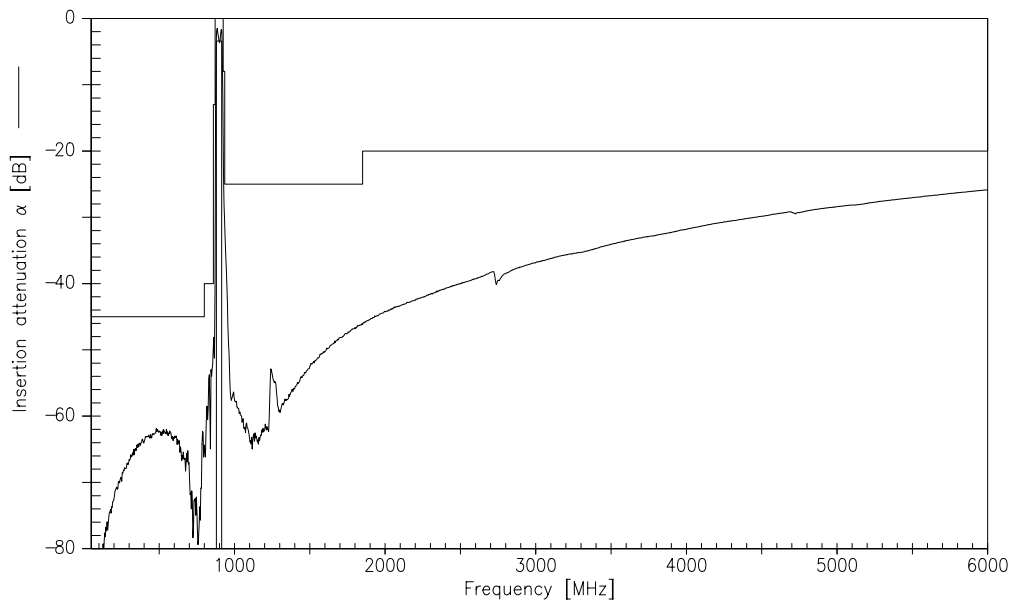
* 6,5 dB for $T = -30$ to $+85 \text{ }^\circ\text{C}$



Transfer function



Transfer function (wideband measurement)





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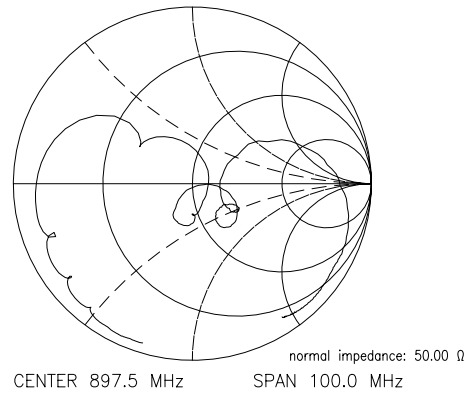
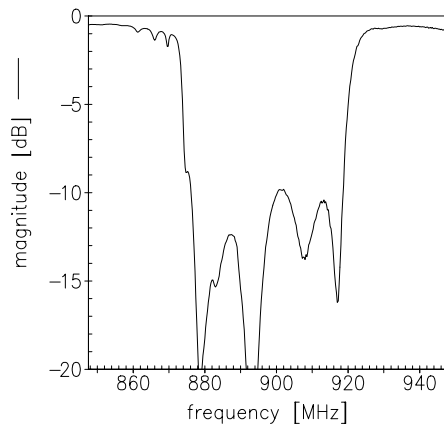
Low-Loss Filter for Mobile Communication

897,50 MHz

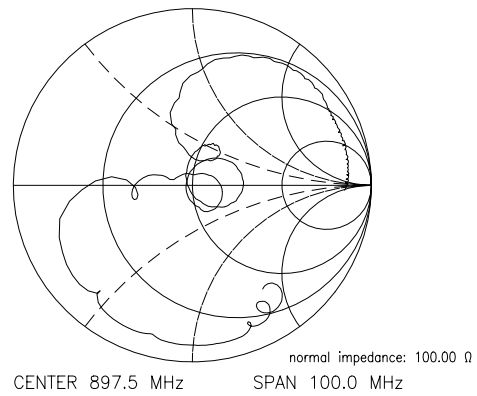
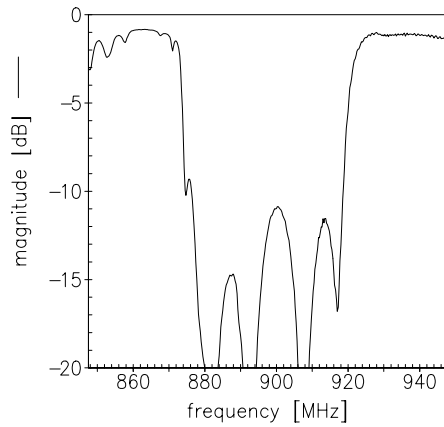
Data Sheet



S_{22}



S_{11}





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Low-Loss Filter for Mobile Communication

897,50 MHz

Data Sheet



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