



# SAW Components

Data Sheet B7764





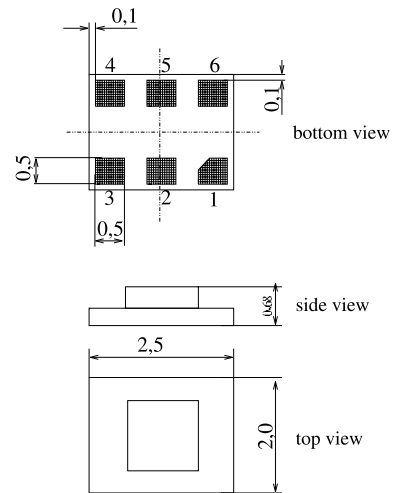
Chip Sized SAW Package DCS6P

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

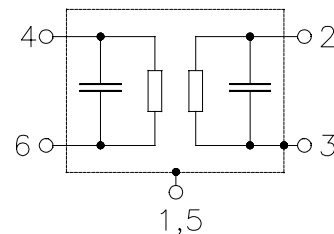
- Ni, gold-plated



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	
Storage temperature range	$T_{stg}$	- 40 / +85	°C	
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V_{MM}$	100	V	machine model
	$V_{HBM}$	250	V	
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		



**Characteristics**

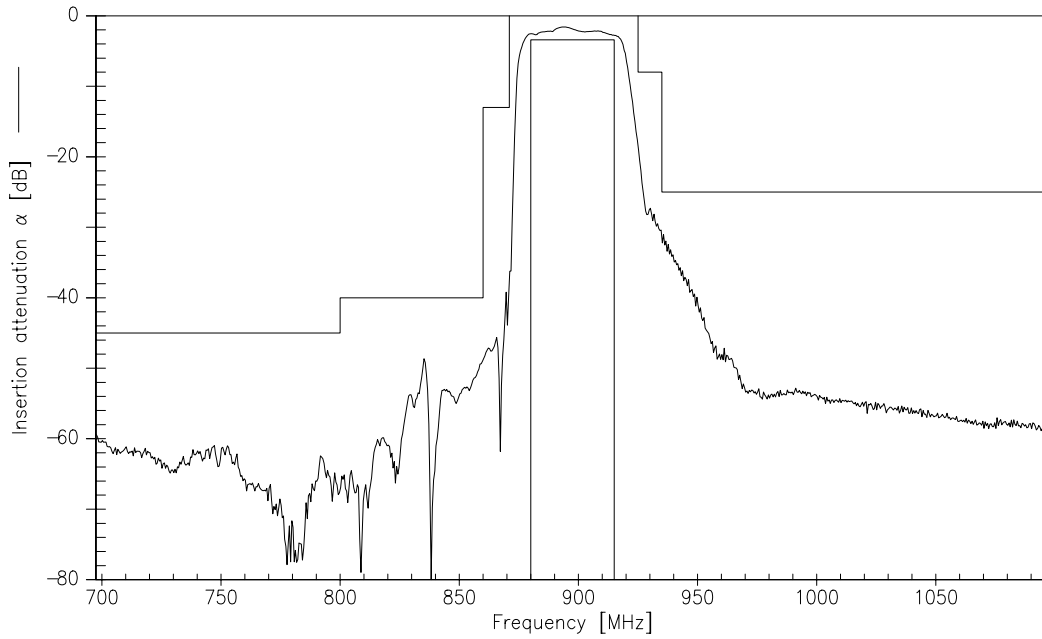
Operating temperature range:  $T = -10 \dots +75 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 100 \text{ } \Omega \parallel 33 \text{ nH (balanced)}$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

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

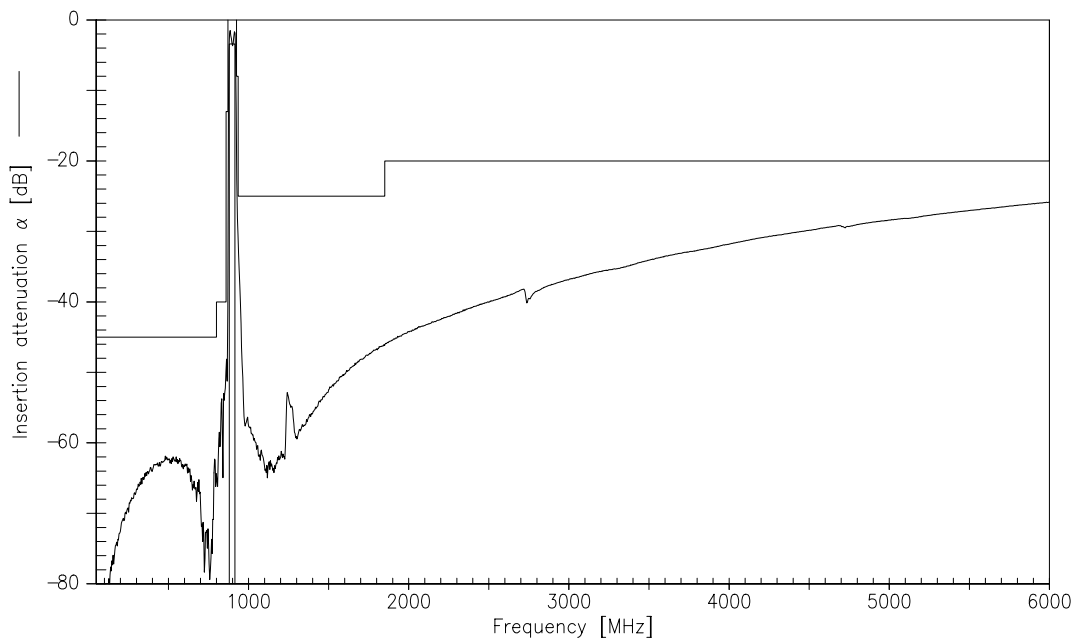
\* 6,5 dB for  $T = -30$  to  $+85 \text{ }^\circ\text{C}$



**Transfer function**

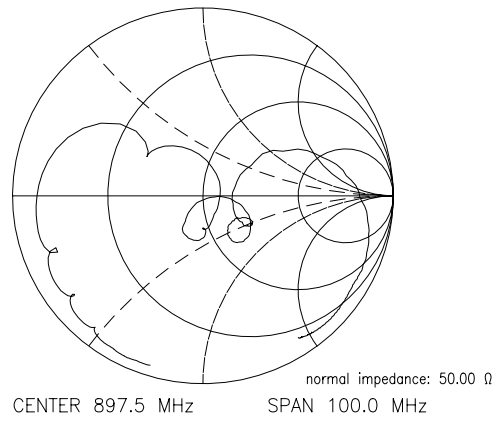
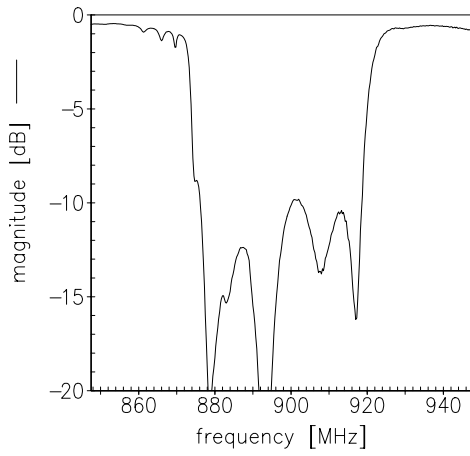


**Transfer function (wideband measurement)**

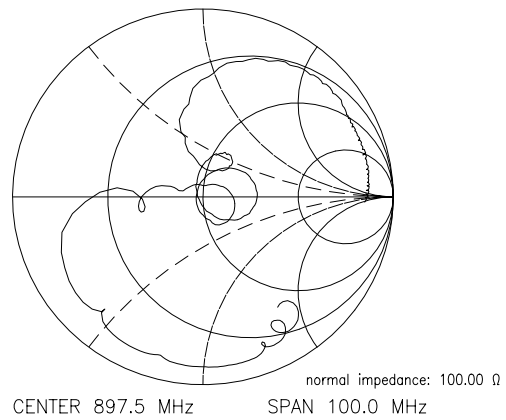
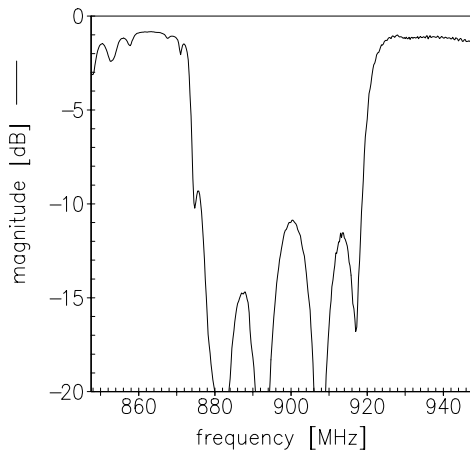




$S_{22}$



$S_{11}$





**SAW Components**

**B7764**

**Low-Loss Filter for Mobile Communication**

**897,50 MHz**

Data Sheet



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