



# SAW Components

Data Sheet B7730, Pb-Free





SAW Components

B7730

Low-Loss Filter for Mobile Communication

881,5 MHz

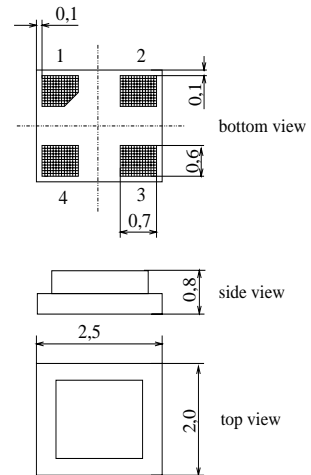
Data Sheet



Chip Sized SAW Package DCS4H

Features

- Low-loss RF filter for mobile telephone  
Cell systems, receive path
- High Tx band selectivity
- Low amplitude ripple
- Usable passband 25 MHz
- Suitable for GPRS class 1 to 12
- Package for Surface Mounted  
Technology (SMT)
- Pb-Free



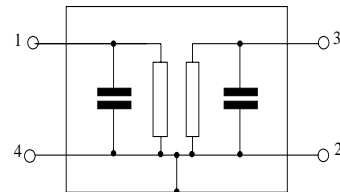
Terminals

- Gold-plated Ni

Dimensions in mm, approx. weight 0,015 g

Pin configuration

- 1 Input
- 3 Output
- 2, 4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7730	B39881-B7730-K710	C61157-A7-A136	F61074-V8189-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	$T$	- 40/+ 85	°C	Machine Model, 10 pulses peak power of GSM signal, duty cycle 4:8
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V_{ESD}^*$	100*	V	
Input power at GSM850, GSM900, GSM1800 and GSM1900 Tx bands	$P_{IN}$	15	dBm	

\* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



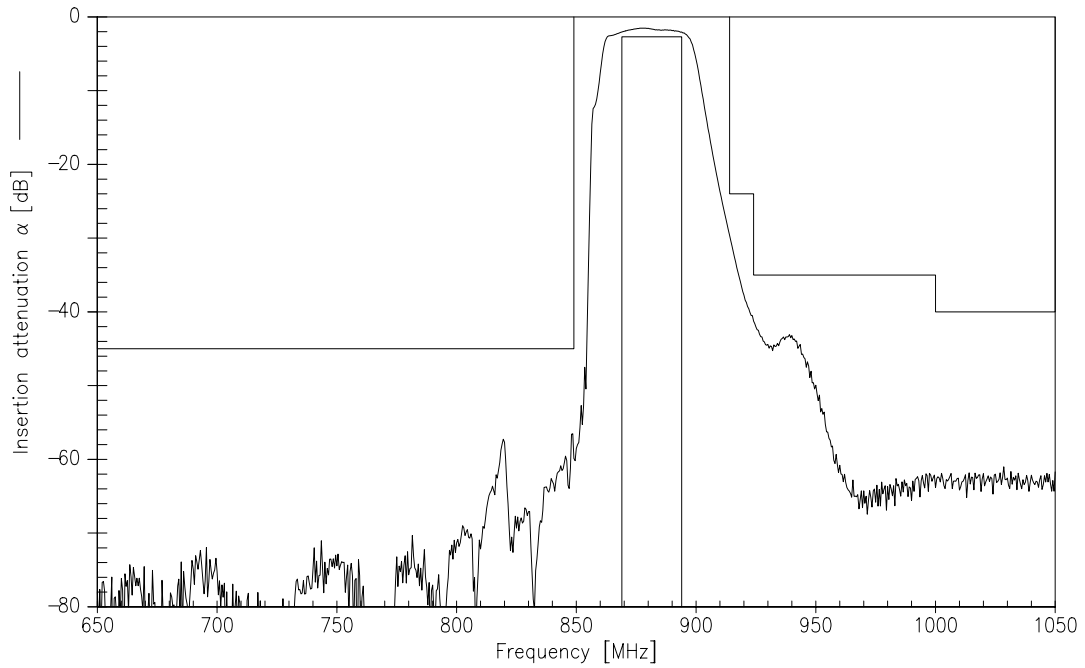
**Characteristics**

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

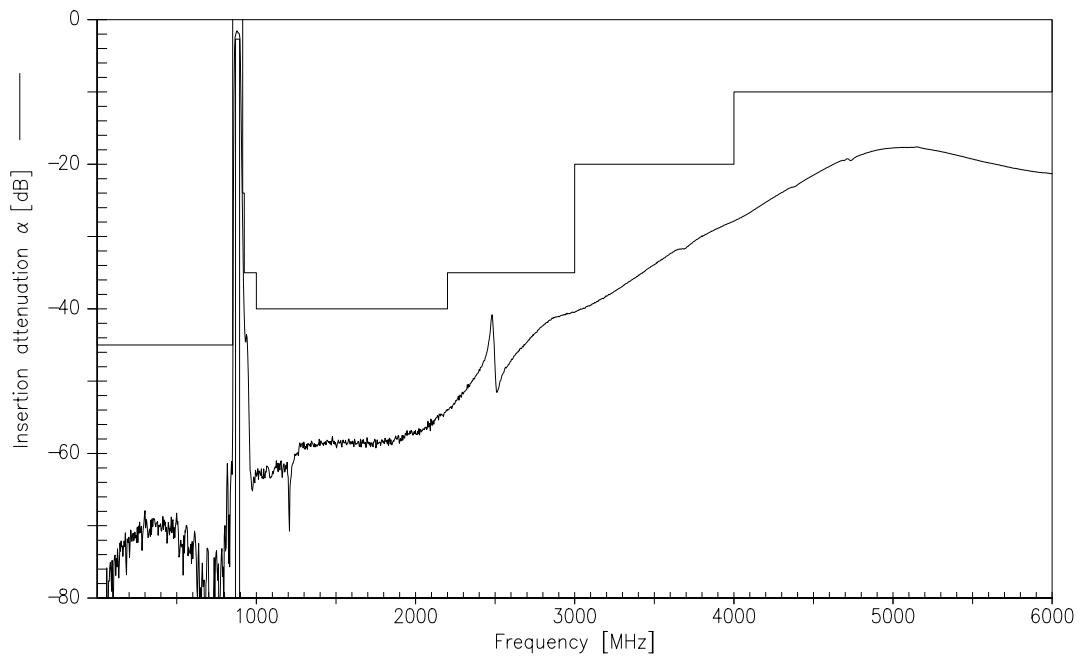
			min.	typ.	max.	
<b>Center frequency</b>	$f_C$		—	881,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$	869,0 ... 894,0 MHz	—	2,5	2,7	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	869,0 ... 894,0 MHz	—	0,9	1,1	dB
<b>Return loss</b>		869,0 ... 894,0 MHz	10,0	12,0	—	dB
<b>Attenuation</b>	$\alpha$					
		0,0 ... 824,0 MHz	45,0	55,0	—	dB
		824,0 ... 849,0 MHz	45,0	50,0	—	dB
		914,0 ... 924,0 MHz	24,0	26,0	—	dB
		924,0 ... 950,0 MHz	35,0	40,0	—	dB
		950,0 ... 997,0 MHz	35,0	50,0	—	dB
		997,0 ... 2200,0 MHz	40,0	50,0	—	dB
		2200,0 ... 3000,0 MHz	35,0	42,0	—	dB
		3000,0 ... 4000,0 MHz	20,0	28,0	—	dB
		4000,0 ... 6000,0 MHz	10,0	18,0	—	dB
<b>Tx band suppression</b>	$\alpha$	824,0 ... 849,0 MHz	45,0	50,0	—	dB



Transfer function (narrowband measurement at 25 °C)



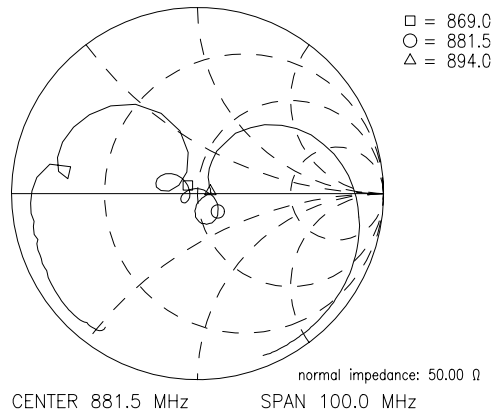
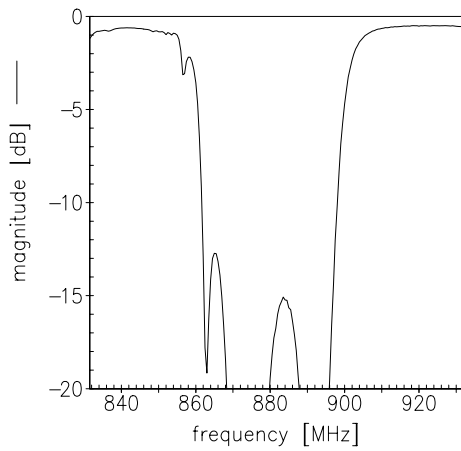
Transfer function (wideband measurement)



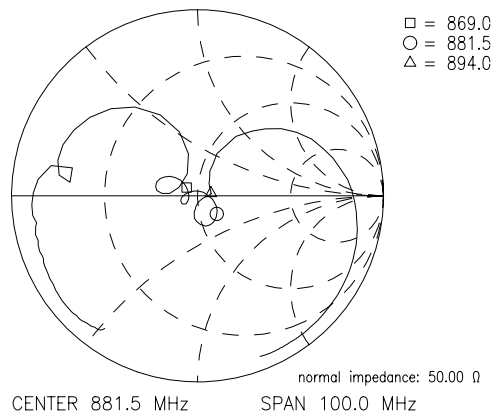
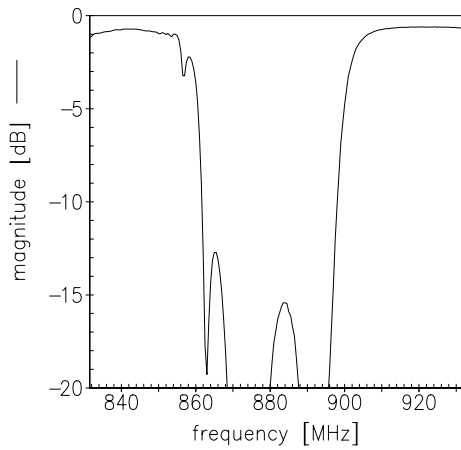


Reflection functions

$S_{11}$



$S_{22}$





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