

# **SAW Components**

Data Sheet B7730, Pb-Free





## SAW Components

B7730

## **Low-Loss Filter for Mobile Communication**

881,5 MHz

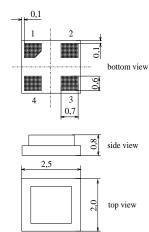
**Data Sheet** 



### 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



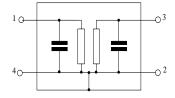
#### **Terminals**

■ Gold-plated Ni

Dimensions in mm, approx. weight 0,015 g

## Pin configuration

1 Input 3 Output 2, 4 Ground



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

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



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#### **Characteristics**

Operating temperature range: T = -30 to +85 °C

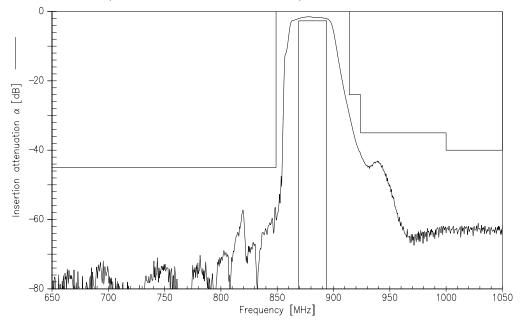
Terminating source impedance:  $Z_{\rm S} = 50~\Omega$ Terminating load impedance:  $Z_{\rm L} = 50~\Omega$ 

				min.	typ.	max.	
Center frequency			$f_{\mathbb{C}}$	_	881,5		MHz
Maximum insertion attenuation 869,0 894,0 MH			$\alpha_{\text{max}}$	_	2,5	2,7	dB
Amplitude ripple (p-p) 869,0	894,0	MHz	Δα	_	0,9	1,1	dB
Return loss 869,0	894,0	MHz		10,0	12,0	_	dB
Attenuation			α				
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
Tx band suppression			α				
824,0	849,0	MHz		45,0	50,0	_	dB

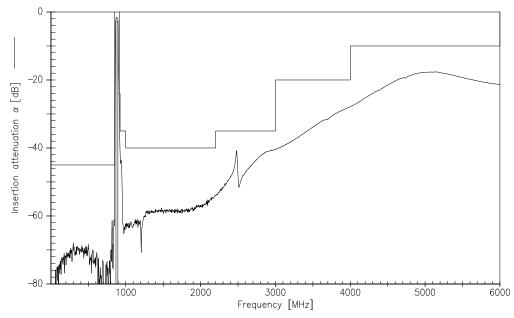




## Transfer function (narrowband measurement at 25 °C)



## Transfer function (wideband measurement)





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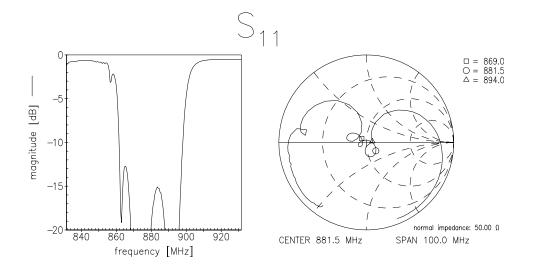
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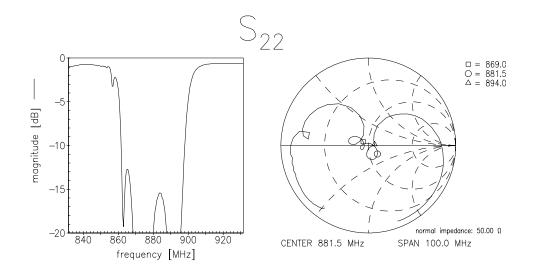
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#### **Reflection functions**







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