



SAW Components

Data Sheet B7724

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured, with light reflecting off the surfaces of the logo.



SAW Components

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Low-Loss Filter for Mobile Communication

836,5 MHz

Data Sheet



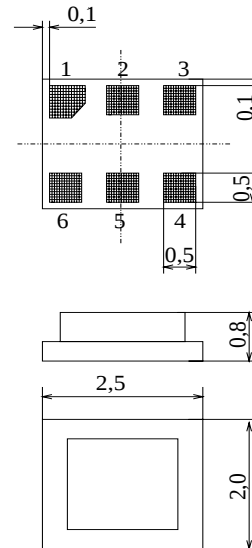
Chip sized SAW package DCS6I

Features

- Low-loss RF filter for mobile telephone GSM 850 systems, transmit path
- Low amplitude ripple
- Usable passband 25 MHz
- Balanced to unbalanced operation
- Impedance transformation from 200 Ω to 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

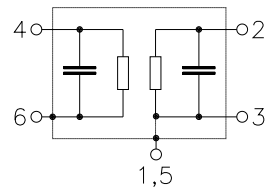
- Ni, gold-plated



Dimensions in mm, approx. weight 0,014g

Pin configuration

- | | |
|---------|-------------------|
| 4, 6 | Balanced input |
| 2 | Unbalanced output |
| 1, 3, 5 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B7724	B39841-B7724-C610	C61157-A7-A76	F61074-V8112-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	$^{\circ}\text{C}$	Source impedance 200 Ω peak power of GSM 850 signal, duty cycle 1:4
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
ESD	V_{ESD}	50	V	
Input power max.	P_{IN}	15	dBm	



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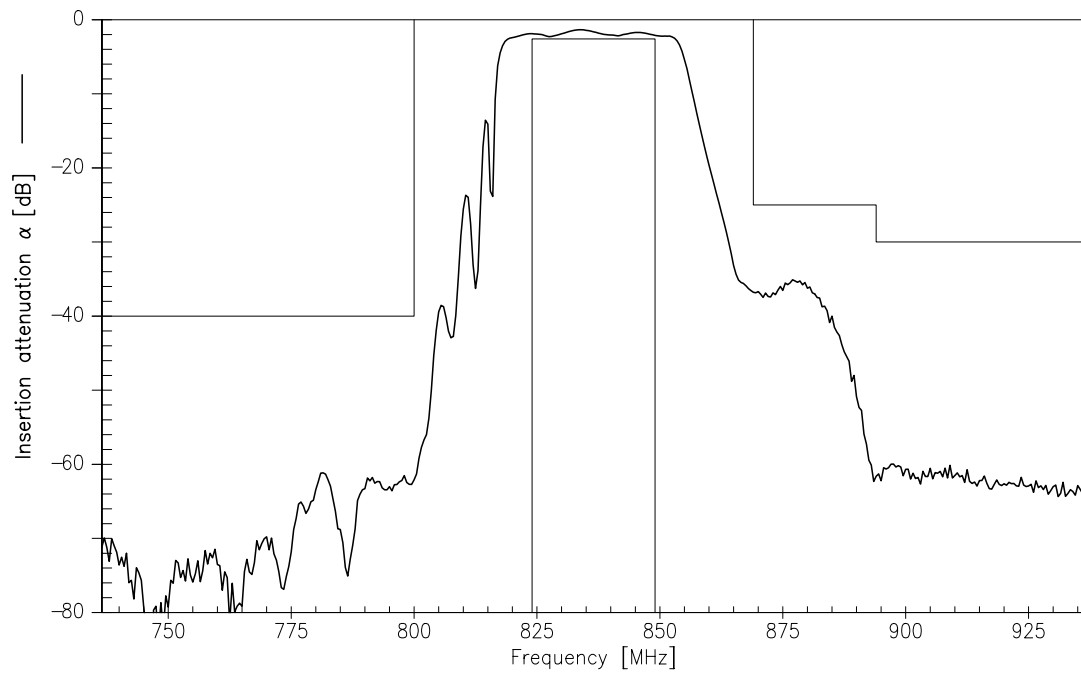
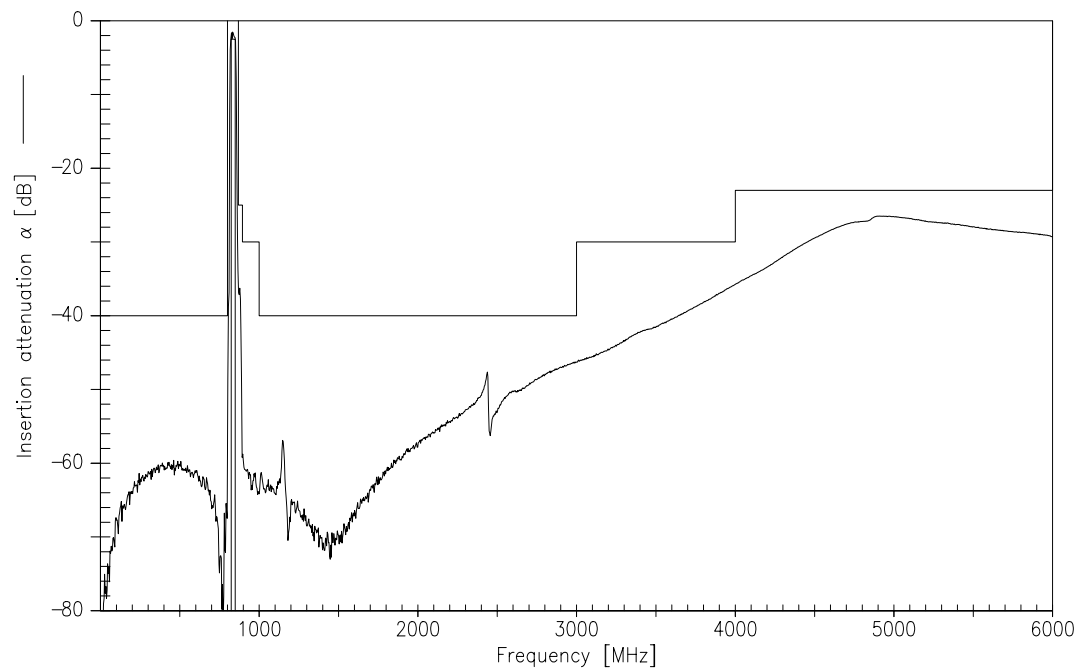
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Characteristics

Operating temperature range: $T = -20$ to $80\text{ }^{\circ}\text{C}$
Terminating source impedance: $Z_S = 200\text{ }\Omega$ (balanced)
Terminating load impedance: $Z_L = 50\text{ }\Omega$ (unbalanced)

		min.	typ.	max.	
Center frequency	f_C	—	836,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
824,0 ... 849,0 MHz		—	2,3	2,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
824,0 ... 849,0 MHz		—	0,9	1,2	dB
Balanced input return loss					
824,0 ... 849,0 MHz		7,0	8,0	—	dB
Unbalanced output return loss					
824,0 ... 849,0 MHz		7,0	8,0	—	dB
Common mode Suppression	$S_{\text{sc}12}$				
0,1 ... 804,0 MHz		30	50	—	dB
824,0 ... 849,0 MHz		20	25	—	dB
869,0 ... 6000,0 MHz		30	35	—	dB
Attenuation	α				
0,0 ... 800,0 MHz		40	55	—	dB
869,0 ... 894,0 MHz		25	36	—	dB
894,0 ... 1000,0 MHz		30	60	—	dB
1000,0 ... 3000,0 MHz		40	45	—	dB
3000,0 ... 4000,0 MHz		30	34	—	dB
4000,0 ... 6000,0 MHz		23	26	—	dB
Rx band suppression	α				
869,0 ... 894,0 MHz		25	36	—	dB

**Transfer function (narrowband measurement)****Transfer function (wideband measurement)**



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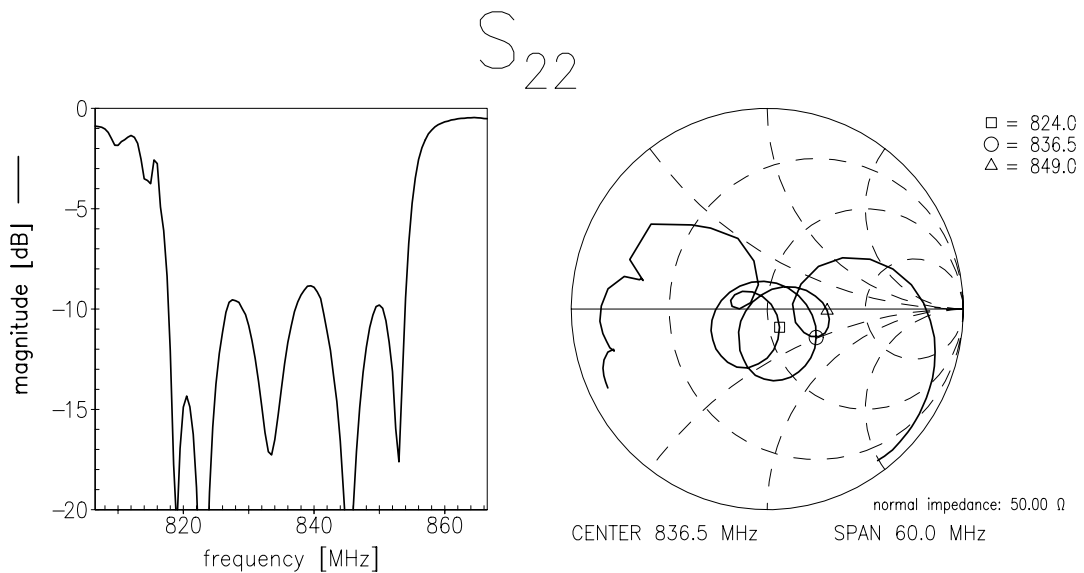
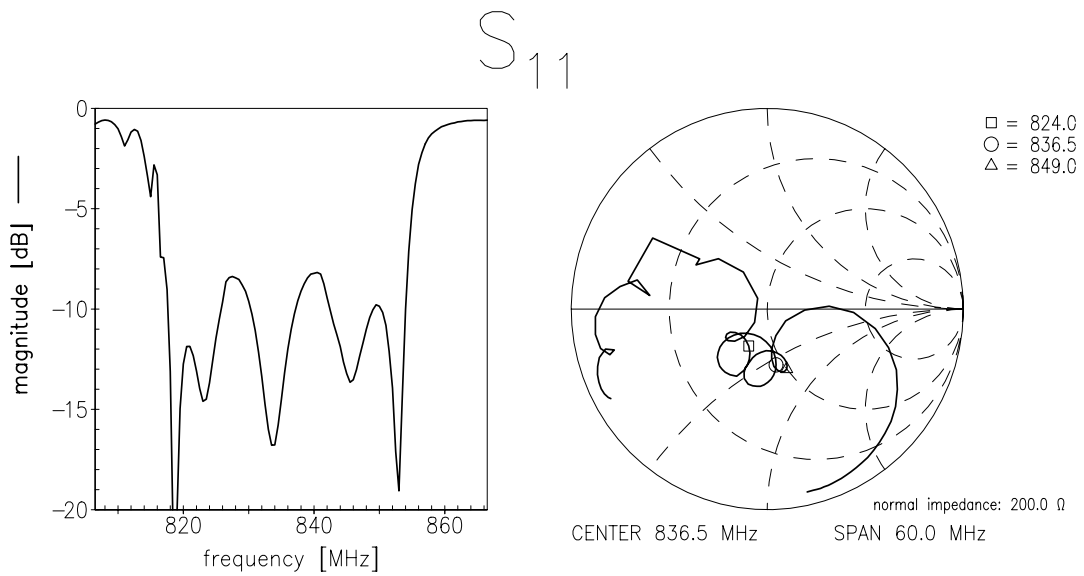
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Matching (measurement; S11 is balanced input)





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P.O. Box 80 17 09, 81617 Munich, GERMANY

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