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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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SAW Components

Data Sheet B7715

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles the company's logo. The background is dark and textured, with a faint map of the world visible.



SAW Components

B7715

Low-Loss Filter for Mobile Communication

897,5 MHz

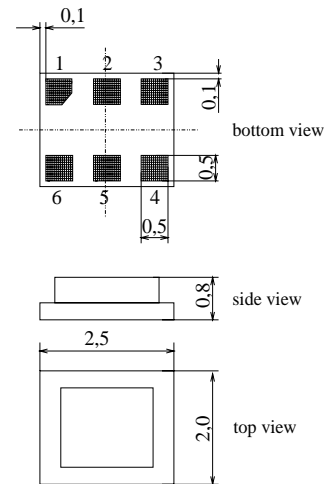
Data Sheet



Chip sized SAW package DCS6I

Features

- Low-loss RF filter for mobile telephone EGSM systems, transmit path
- Low amplitude ripple
- Usable passband 35 MHz
- Balanced to unbalanced operation
- Impedance transformation from 200 Ω to 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**



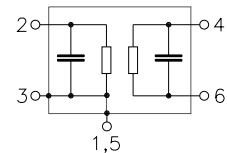
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,014g

Pin configuration

- 2 Output, unbalanced
- 4, 6 Balanced inputs
- 1, 3, 5 To be grounded
- 1, 5 Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B7715	B39901-B7715-C610	C61157-A7-A76	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 10 / + 80	°C	
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Input power max.				> 2000 hrs at 85°C peak power of GSM signal, duty cycle 2 : 8 duty cycle 4 : 8,
880 ... 915 MHz	P_{IN}	14	dBm	
		12	dBm	
elsewhere		0	dBm	continuous wave



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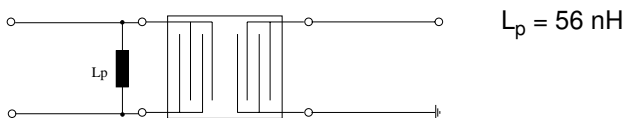


Characteristics

Operating temperature range: $T = 25 \pm 2^\circ\text{C}$
 Terminating source impedance: $Z_S = 200 \Omega$ including matching network
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	897,5	—	MHz
Maximum insertion attenuation	α_{\max}				
880,0 ... 915,0 MHz		—	2,6	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,1	1,5	dB
Balanced input VSWR					
880,0 ... 915,0 MHz		—	1,7	2,0	
Unbalanced output VSWR					
880,0 ... 915,0 MHz		—	1,8	2,2	
Diff. to common mode suppression	S_{sc12}				
880,0 ... 915,0 MHz		20	23	—	dB
Input phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
880,0 ... 915,0 MHz		-10	—	+10	degree
Input amplitude balance (S_{31} / S_{21})					
880,0 ... 915,0 MHz		-1,0	—	1,0	dB
Attenuation	α				
0,0 ... 850,0 MHz		45	58	—	dB
850,0 ... 871,0 MHz		12	21	—	dB
935,0 ... 960,0 MHz		20	34	—	dB
960,0 ... 1850,0 MHz		35	42	—	dB
1850,0 ... 3660,0 MHz		35	40	—	dB
3660,0 ... 6000,0 MHz		15	26	—	dB

Test matching network





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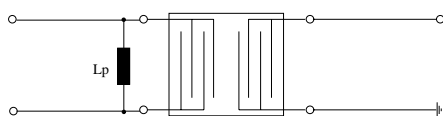
**Data Sheet
Characteristics**



Operating temperature range: $T = -10$ to $80\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 200\ \Omega$ including matching network
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	897,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,7	3,2	dB
	880,0 ... 915,0 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,2	1,8	dB
	880,0 ... 915,0 MHz				
Balanced input VSWR		—	1,7	2,0	
	880,0 ... 915,0 MHz				
Unbalanced output VSWR		—	1,8	2,2	
	880,0 ... 915,0 MHz				
Diff. to common mode suppression	S_{sc12}	20	23	—	dB
	880,0 ... 915,0 MHz				
Input phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)		-10	—	+10	degree
	880,0 ... 915,0 MHz				
Input amplitude balance (S_{31} / S_{21})		-1,0	—	1,0	dB
	880,0 ... 915,0 MHz				
Attenuation	α				dB
	0,0 ... 850,0 MHz	45	58	—	dB
	850,0 ... 871,0 MHz	12	21	—	dB
	935,0 ... 960,0 MHz	20	34	—	dB
	960,0 ... 1850,0 MHz	35	42	—	dB
	1850,0 ... 3660,0 MHz	35	40	—	dB
	3660,0 ... 6000,0 MHz	15	26	—	dB

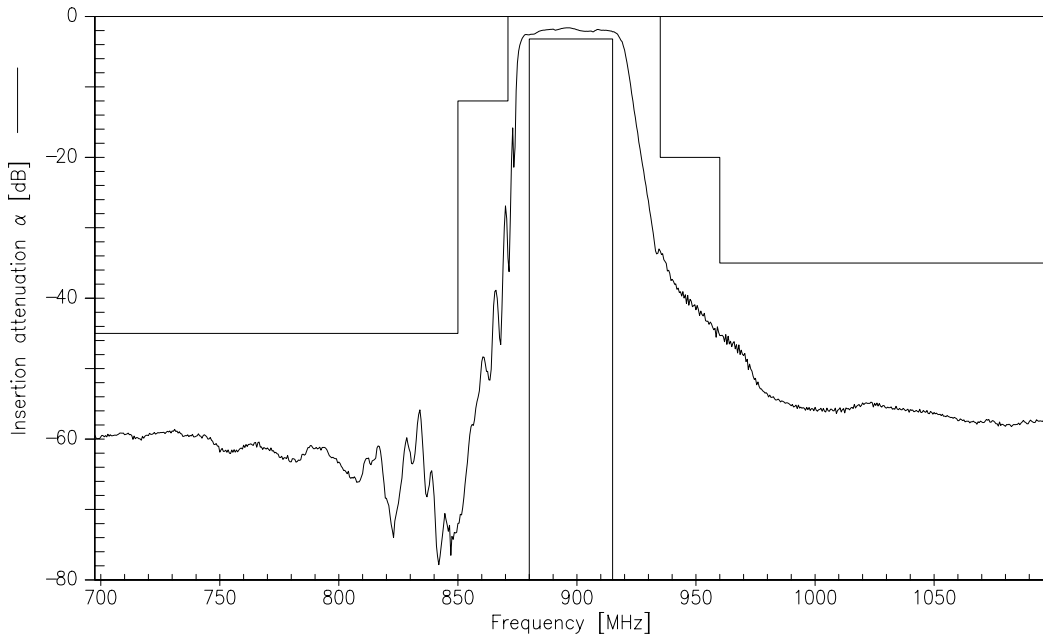
Test matching network



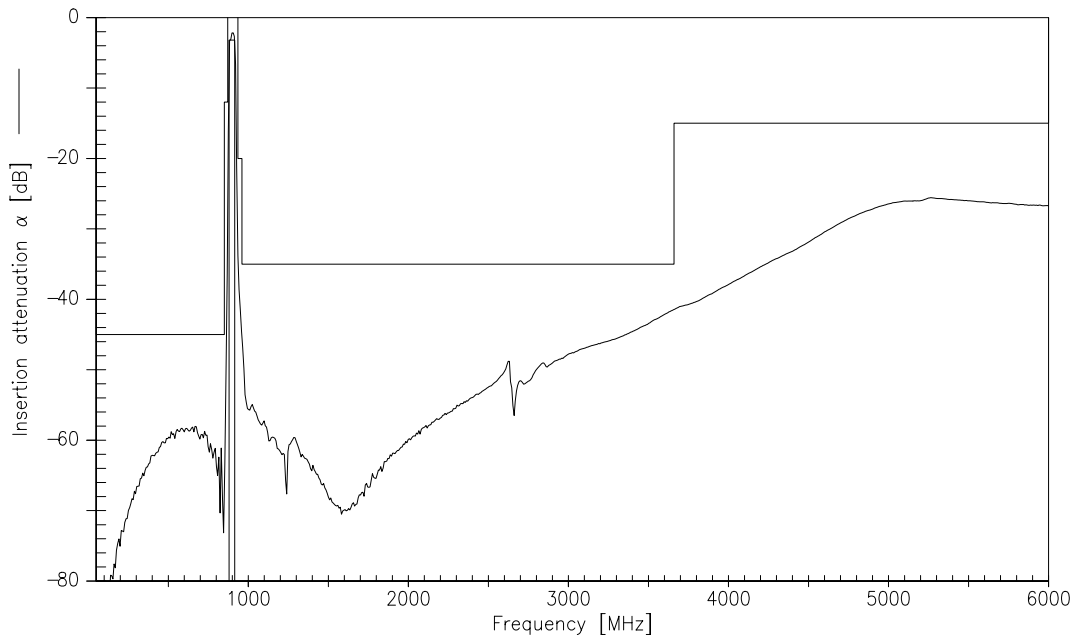
$L_p = 56\text{ nH}$



Transfer function (measurement)

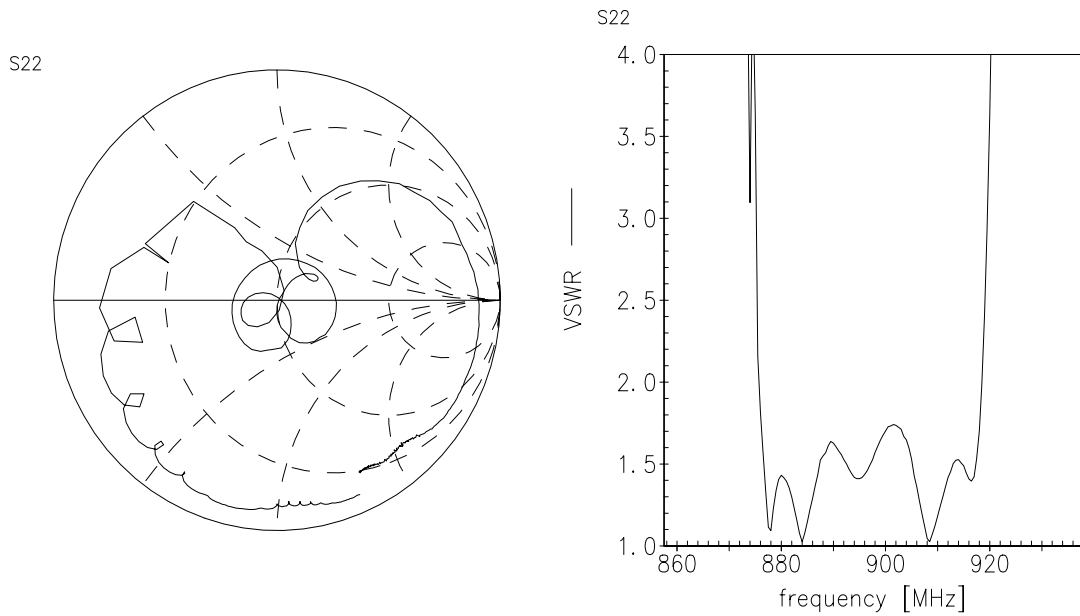
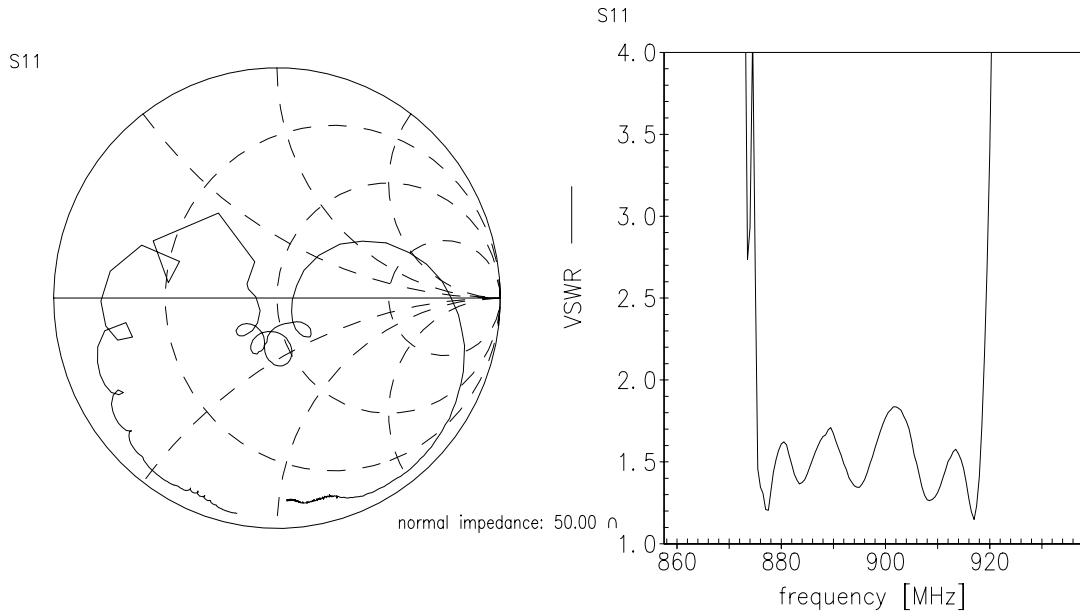


Transfer function (wideband measurement)





Matching (measurement including calculated matching network; S11 is unbalanced output)





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