



SAW Components

Data Sheet B9015





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Low-Loss Filter for Mobile Communication

897,5 MHz

Data Sheet



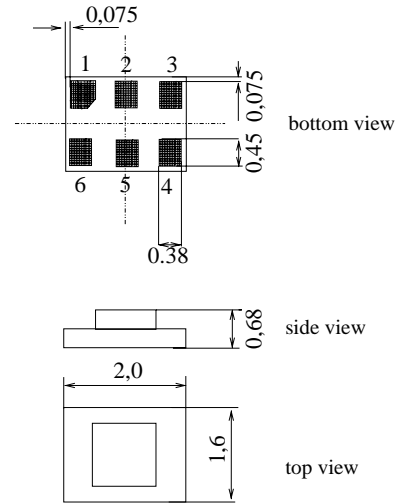
Chip sized SAW package DCS6Q

Features

- Low-loss RF filter for mobile telephone EGSM systems, transmit path
- Low amplitude ripple
- Usable passband 35MHz
- Impedance transformation from 200Ω to 50Ω
- Suitable for GPRS class 1 to 12
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

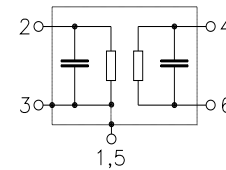
- Ni, gold-plated



Dimensions in mm

Pin configuration

- 2 Output, unbalanced
- 4, 6 Inputs, balanced
- 1, 3, 5 To be grounded
- 1, 5 Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B9015	B39901-B9015-E710	C61157-A7-A104	F61074-V8152-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 10/+ 80	°C	source impedance 200Ω, load impedance 50Ω duty cycle 1 : 8 duty cycle 4 : 8 continuous wave
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
Input power max.				
880 ... 915 MHz	P_{IN}	15	dBm	
elsewhere		0	dBm	



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Characteristics

Operating temperature range: $T = +25 \pm 5^\circ \text{C}$
 Terminating source impedance: $Z_S = 200 \Omega \parallel 82 \text{ nH}$
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	897,5	—	MHz
Maximum insertion attenuation	α_{max}	—	2,5	3,0	dB
880,0 ... 915,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,9	1,5	dB
880,0 ... 915,0 MHz					
Input VSWR		—	1,8	2,1	
880,0 ... 915,0 MHz					
Balanced Output VSWR		—	1,7	2,0	
880,0 ... 915,0 MHz					
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)		-10,0	0,0	+10,0	°
Output amplitude balance (S_{31}/S_{21})		-1,0	0,0	1,0	dB
880,0 ... 915,0 MHz					
Attenuation	α				
0,0 ... 800,0 MHz		55,0	72,0	—	dB
800,0 ... 850,0 MHz		45,0	56,0	—	dB
850,0 ... 871,0 MHz		12,0	23,0	—	dB
935,0 ... 960,0 MHz		20,0	28,0	—	dB
960,0 ... 1000,0 MHz		34,0	36,0	—	dB
1000,0 ... 6000,0 MHz		40,0	60,0	—	dB



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Operating temperature range: $T = -10$ to $+80^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 200\ \Omega \parallel 82\ \text{nH}$
 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)	$\Delta\alpha$	—	1,0	1,8	dB
880,0 ... 915,0 MHz					
Input VSWR		—	1,8	2,1	
880,0 ... 915,0 MHz					
Output VSWR		—	1,7	2,0	
880,0 ... 915,0 MHz					
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)		-10,0	0,0	+10,0	°
880,0 ... 915,0 MHz					
Output amplitude balance ($ S_{31}/S_{21} $)		-1,0	0,0	-1,0	dB
880,0 ... 915,0 MHz					
Attenuation	α				
0,0 ... 800,0 MHz		55,0	72,0	—	dB
800,0 ... 850,0 MHz		45,0	56,0	—	dB
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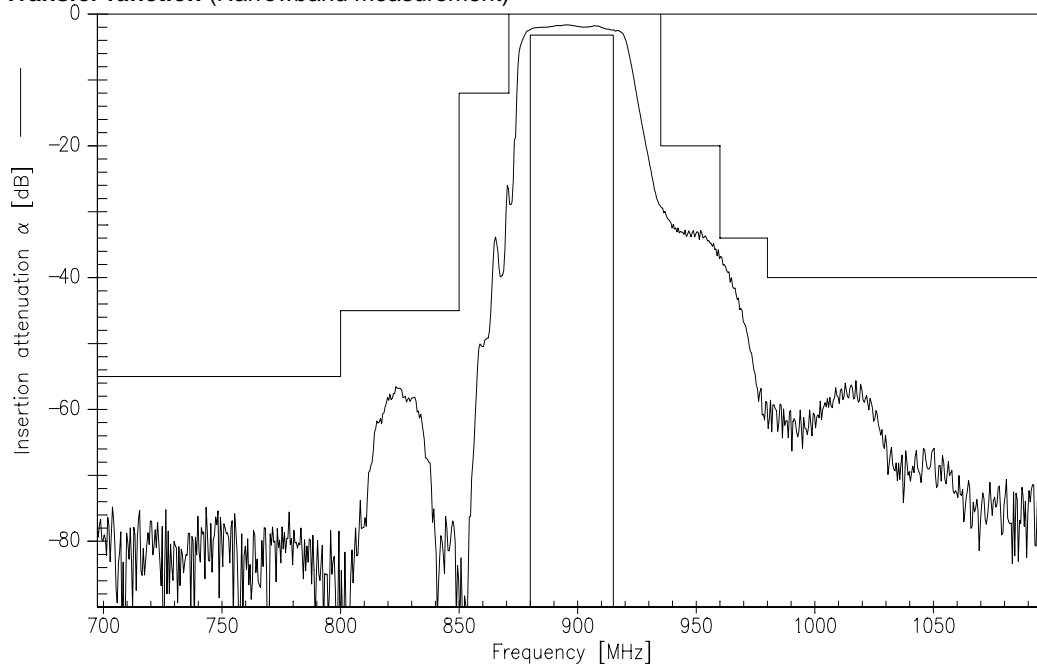
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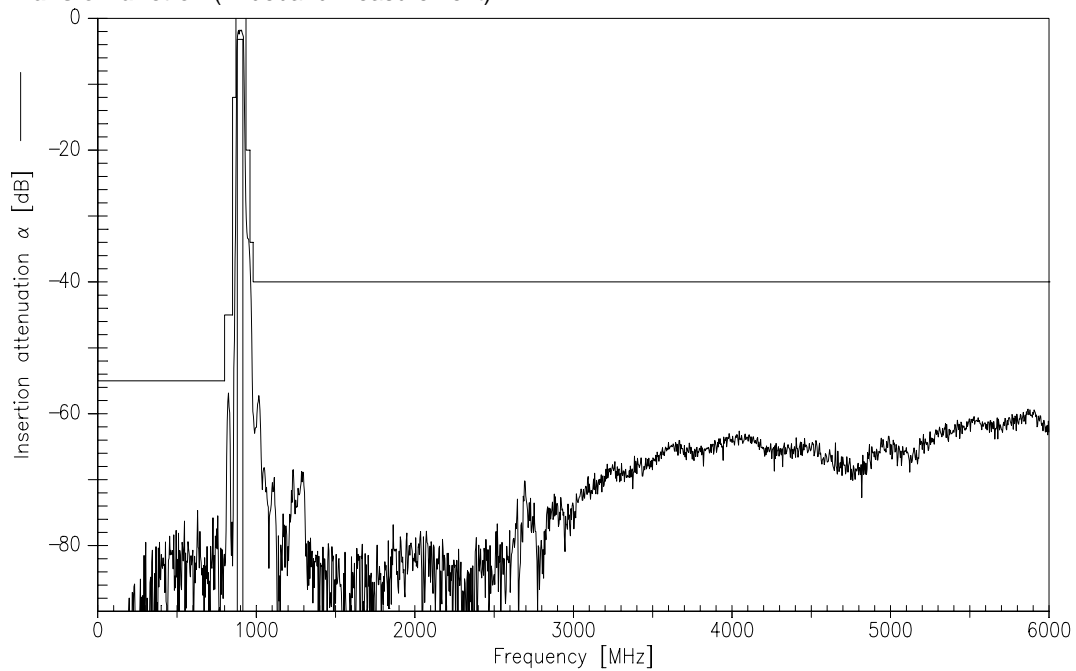
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Transfer function (Narrowband measurement)



Transfer function (Wideband measurement)





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Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC WT
P.O. Box 80 17 09, 81617 Munich, GERMANY

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