EPCOS

SAW Components

Data Sheet B9015

Data Sheet

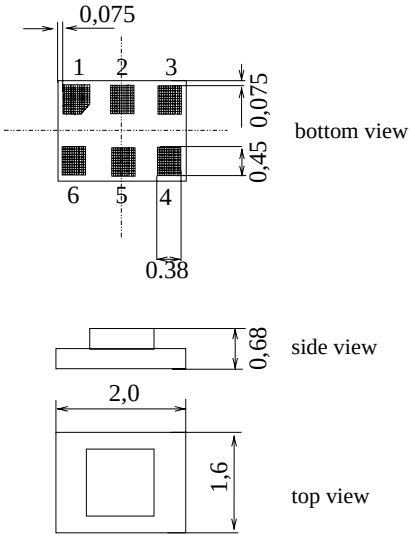
Chip sized SAW package DCS6Q

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 **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

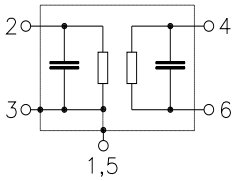
- Ni, gold-plated



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 **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

Characteristics

Operating temperature range: T = +25 ± 5°C
Terminating source impedance: Z_S = 200 Ω || 82 nH
Terminating load impedance: Z_L = 50 Ω

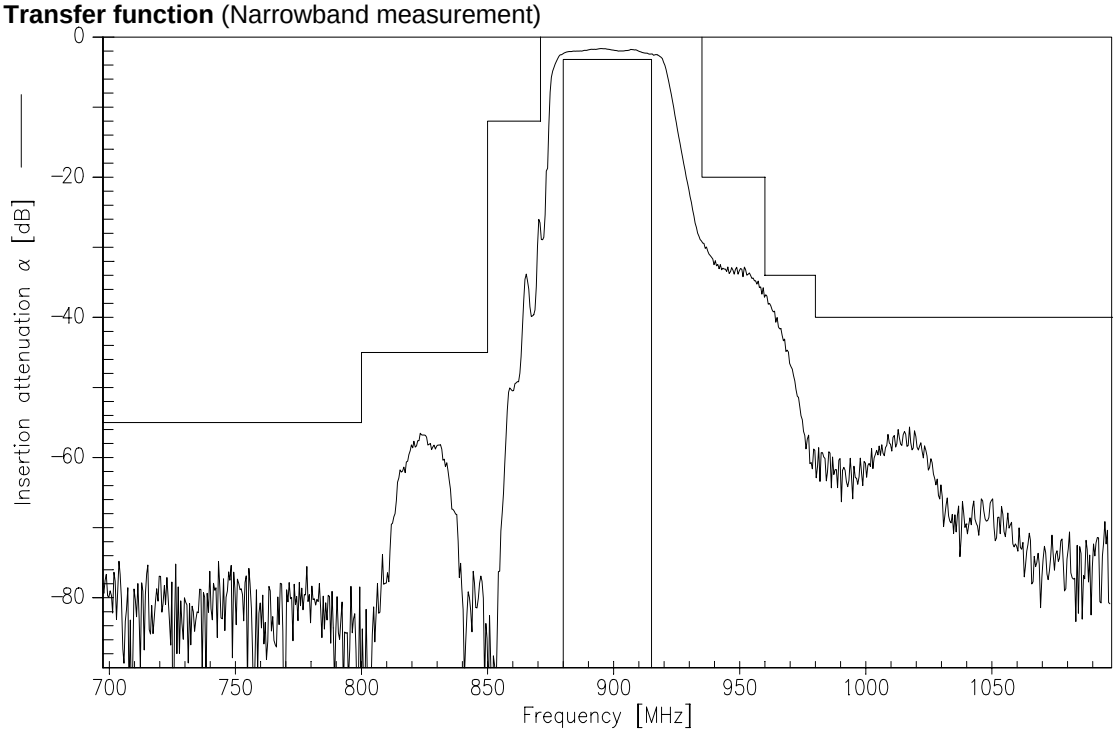
		min.	typ.	max.	
Center frequency	f_c	—	897,5	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,5	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	0,9	1,5	dB
Input VSWR					
880,0 ... 915,0 MHz		—	1,8	2,1	
Balanced Output VSWR					
880,0 ... 915,0 MHz		—	1,7	2,0	
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180°$)		-10,0	0,0	+10,0	°
Output amplitude balance ($\|S_{31}/S_{21}\|$)					
880,0 ... 915,0 MHz		-1,0	0,0	1,0	dB
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

Characteristics

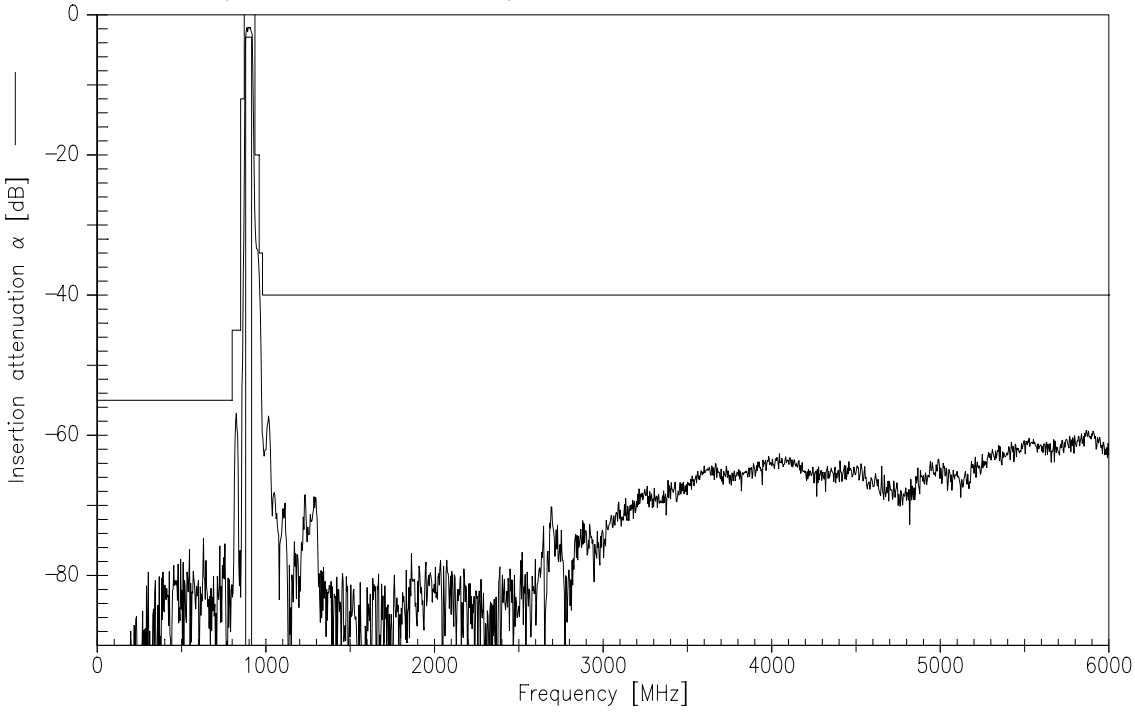
Operating temperature range: T = -10 to +80°C
Terminating source impedance: Z_S = 200 Ω || 82 nH
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	897,5	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,7	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ...9150,0 MHz		—	1,0	1,8	dB
Input VSWR					
880,0 ... 915,0 MHz		—	1,8	2,1	
Output VSWR					
880,0 ... 915,0 MHz		—	1,7	2,0	
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180°$)					
880,0 ... 915,0 MHz		-10,0	0,0	+10,0	°
Output amplitude balance ($\lvert S_{31}/S_{21}\rvert$)					
880,0 ... 915,0 MHz		-1,0	0,0	-1,0	dB
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

Transfer function (Narrowband measurement)



Transfer function (Wideband measurement)



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

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.