EPCOS

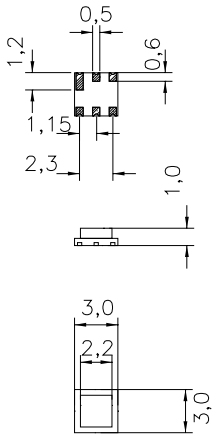
SAW Components

Data Sheet B7603

Chip sized SAW package

Features

- Low-loss RF filter for mobile telephone EGSM system, transmit path
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)



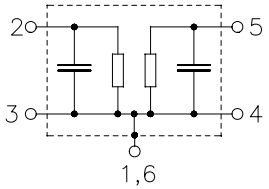
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,027g

Pin configuration

2	Input
3	Input - ground
5	Output
4	Output - ground
1,6	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B7603	B39901-B7603-A210	C61157-A7-A61	F61074-V8083-Z000

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

Maximum ratings

Operable temperature range	T	– 20 / + 80	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	0	V	
Input power max.				source and load impedance 50 Ω
880...915 MHz	P_{IN}	10	dBm	peak power of GSM signal, duty cycle 1 : 8
elsewhere		5	dBm	continuous wave

Characteristics

Operating temperature range: T = 25 ± 2 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	897,50	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,6	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,3	1,4	dB
Input VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α				
0,0 ... 840,0 MHz		17	18	—	dB
840,0 ... 860,0 MHz		17	20	—	dB
860,0 ... 870,0 MHz		10	25	—	dB
925,0 ... 935,0 MHz		4,5	8	—	dB
935,0 ...1850,0 MHz		20	21	—	dB
1850,0 ...3660,0 MHz		7	16	—	dB

Characteristics

Operating temperature range: T = +10 to +60˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	897,50	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,7	2,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,4	1,5	dB
Input VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α				
0,0 ... 840,0 MHz		17	18	—	dB
840,0 ... 860,0 MHz		17	20	—	dB
860,0 ... 870,0 MHz		10	19	—	dB
925,0 ... 935,0 MHz		4	7	—	dB
935,0 ...1850,0 MHz		20	21	—	dB
1850,0 ...3660,0 MHz		7	16	—	dB

Characteristics

Operating temperature range: T = -20 to +70˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

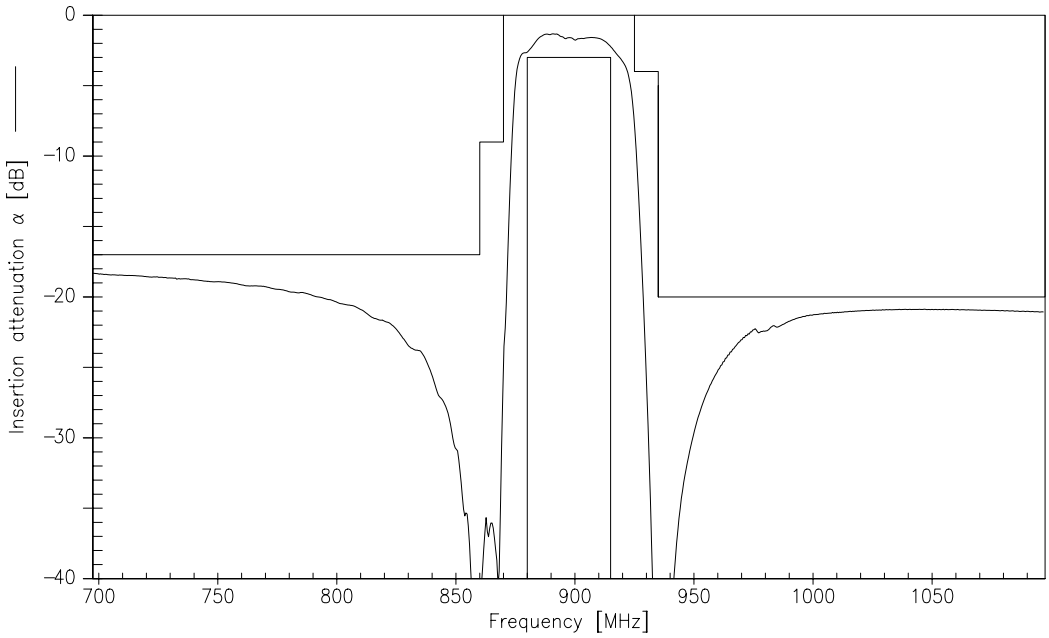
		min.	typ.	max.	
Center frequency	f_c	—	897,50	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,7	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,4	1,8	dB
Input VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α				
0,0 ... 840,0 MHz		17	18	—	dB
840,0 ... 860,0 MHz		17	19	—	dB
860,0 ... 870,0 MHz		10	20	—	dB
925,0 ... 935,0 MHz		3	5	—	dB
935,0 ...1850,0 MHz		20	21	—	dB
1850,0 ...3660,0 MHz		7	16	—	dB

Characteristics

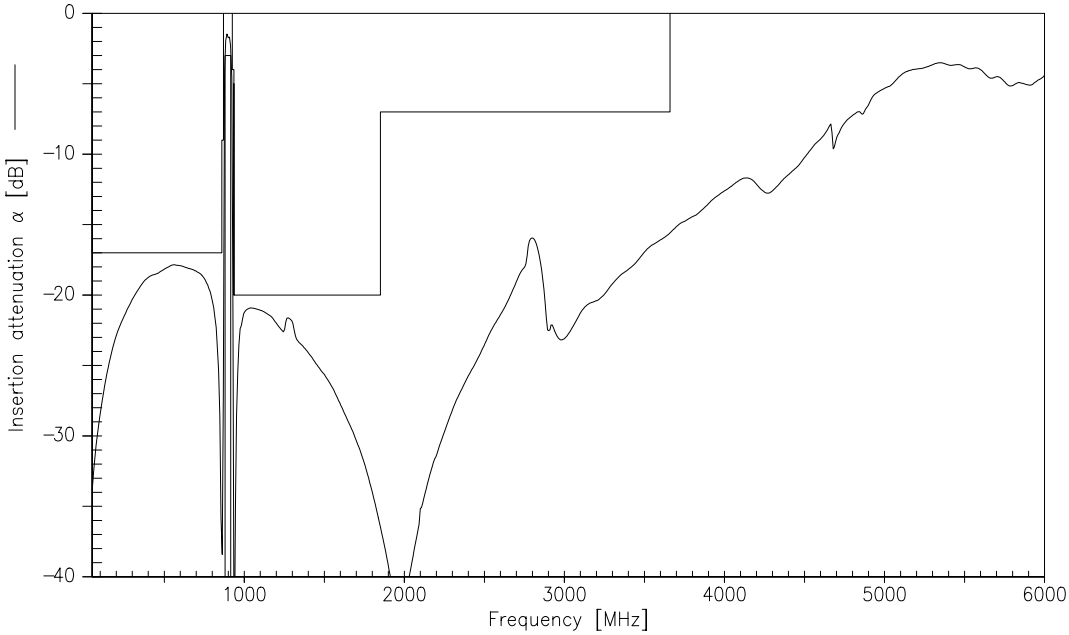
Operating temperature range: T = -10 to +80˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	897,50	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	2,7	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,4	1,7	dB
Input VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α				
0,0 ... 840,0 MHz		17	18	—	dB
840,0 ... 860,0 MHz		17	20	—	dB
860,0 ... 870,0 MHz		9	18	—	dB
925,0 ... 935,0 MHz		4	6	—	dB
935,0 ...1850,0 MHz		20	21	—	dB
1850,0 ...3660,0 MHz		7	16	—	dB

Transfer function (measurement)



Transfer function (wideband; measurement)



Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E MF
P.O. Box 80 17 09, D-81617 München

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.
Terms of delivery and rights to change design reserved.

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.