EPCOS

SAW Components

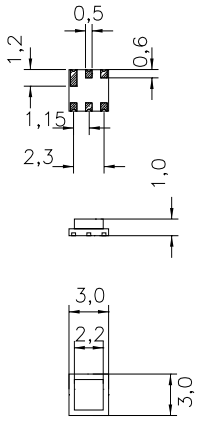
Data Sheet B7602

Data Sheet

Chip sized SAW package

Features

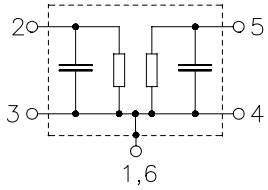
- Low-loss RF filter for mobile telephone EGSM system, receive path
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)



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
B7602	B39941-B7602-A610	C61157-A7-A62	F61074-V8086-Z000

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

Maximum ratings

Operable temperature range	T	– 10 / + 80	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	50	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		0	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	—	942,50	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	2,5	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,1	1,6	dB
Input VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Output VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Attenuation	α				
0,0 ... 880,0 MHz		20	21	—	dB
880,0 ... 905,0 MHz		20	26	—	dB
905,0 ... 915,0 MHz		13	25	—	dB
980,0 ...1005,0 MHz		20	28	—	dB
1005,0 ...1725,0 MHz		20	23	—	dB
1725,0 ...1920,0 MHz		23	28	—	dB
1920,0 ...3000,0 MHz		19	26	—	dB
3000,0 ...4000,0 MHz		8	19	—	dB
4000,0 ...4800,0 MHz		5	18	—	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	—	942,50	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	2,7	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,3	1,7	dB
Input VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Output VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Attenuation	α				
0,0 ... 880,0 MHz		20	21	—	dB
880,0 ... 905,0 MHz		20	26	—	dB
905,0 ... 915,0 MHz		11	21	—	dB
980,0 ...1005,0 MHz		20	28	—	dB
1005,0 ...1725,0 MHz		20	23	—	dB
1725,0 ...1920,0 MHz		23	28	—	dB
1920,0 ... 3000,0 MHz		19	26	—	dB
3000,0 ...4000,0 MHz		8	19	—	dB
4000,0 ...4800,0 MHz		5	18	—	dB

Characteristics

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

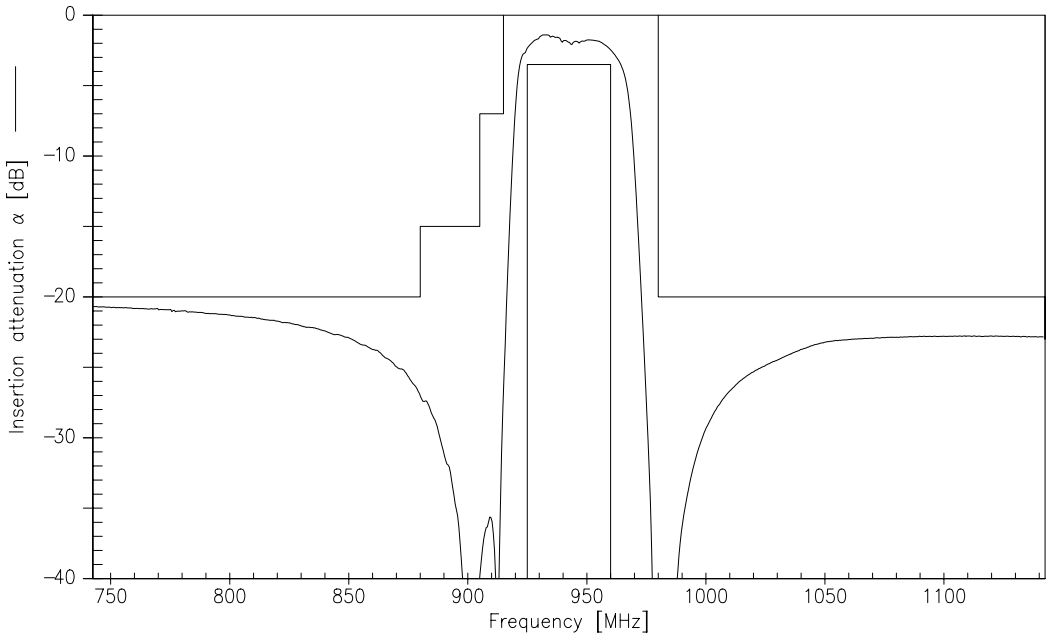
		min.	typ.	max.	
Center frequency	f_c	—	942,50	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	2,8	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,4	2,1	dB
Input VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Output VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Attenuation	α				
0,0 ... 880,0 MHz		20	21	—	dB
880,0 ... 905,0 MHz		20	26	—	dB
905,0 ... 915,0 MHz		7	19	—	dB
980,0 ...1005,0 MHz		20	28	—	dB
1005,0 ...1725,0 MHz		20	23	—	dB
1725,0 ...1920,0 MHz		23	28	—	dB
1920,0 ... 3000,0 MHz		19	26	—	dB
3000,0 ...4000,0 MHz		8	19	—	dB
4000,0 ...4800,0 MHz		5	18	—	dB

Characteristics

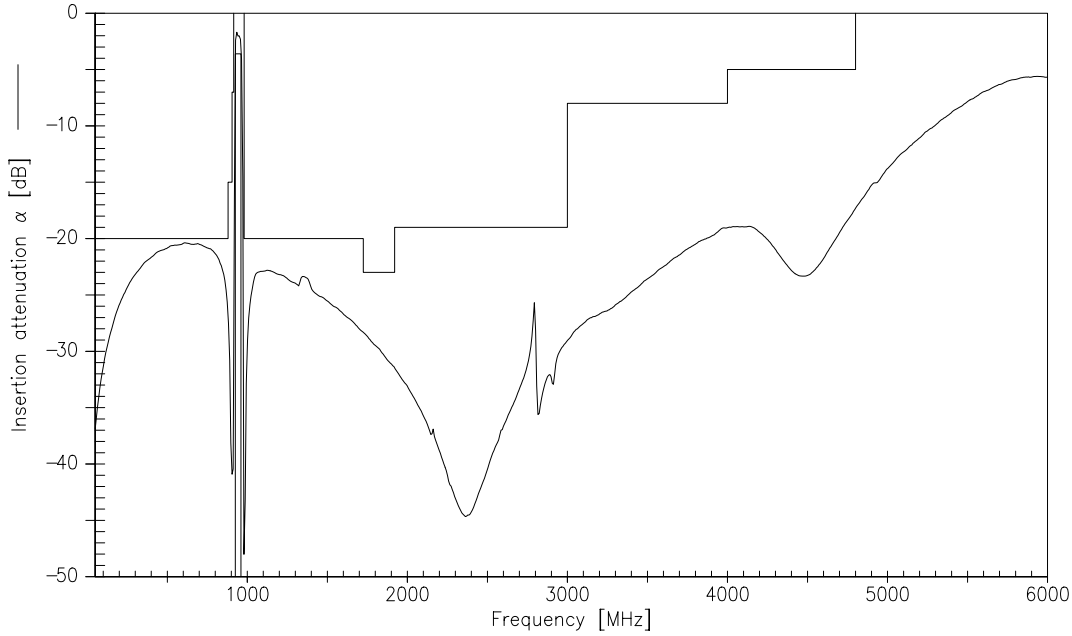
Operating temperature range: T = -20 to +70˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	942,50	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	2,8	3,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,4	2,2	dB
Input VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Output VSWR					
925,0 ... 960,0 MHz		—	2,1	2,3	
Attenuation	α				
0,0 ... 880,0 MHz		20	21	—	dB
880,0 ... 905,0 MHz		20	26	—	dB
905,0 ... 915,0 MHz		7	20	—	dB
980,0 ...1005,0 MHz		20	28	—	dB
1005,0 ...1725,0 MHz		20	23	—	dB
1725,0 ...1920,0 MHz		23	28	—	dB
1920,0 ... 3000,0 MHz		19	26	—	dB
3000,0 ...4000,0 MHz		8	19	—	dB
4000,0 ...4800,0 MHz		5	18	—	dB

Transfer function



Transfer function (wideband)



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.