EPCOS

SAW Components

Data Sheet B4146

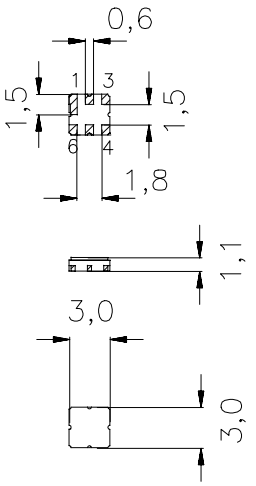
Ceramic package **DCC6D**

Features

- Low-loss RF filter for mobile telephone AMPS system, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50 Ω to 200 Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

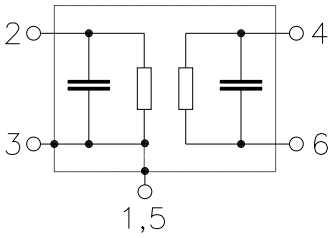
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
4	Balanced output
6	Balanced output
1, 3, 5	Ground, to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4146	B39881-B4146-U510	C61157-A7-A68	F61074-V8089-Z000

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

Maximum ratings

Operable temperature range	T	– 40 / + 85	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	5	V	
ESD	V_{ESD}	50	V	Human Body Model
Input power max.	P_{IN}	5	dBm	source impedance 50 Ω

Characteristics

Operating temperature range: T = -30 to +85 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 200 Ω || 68nH(balanced)

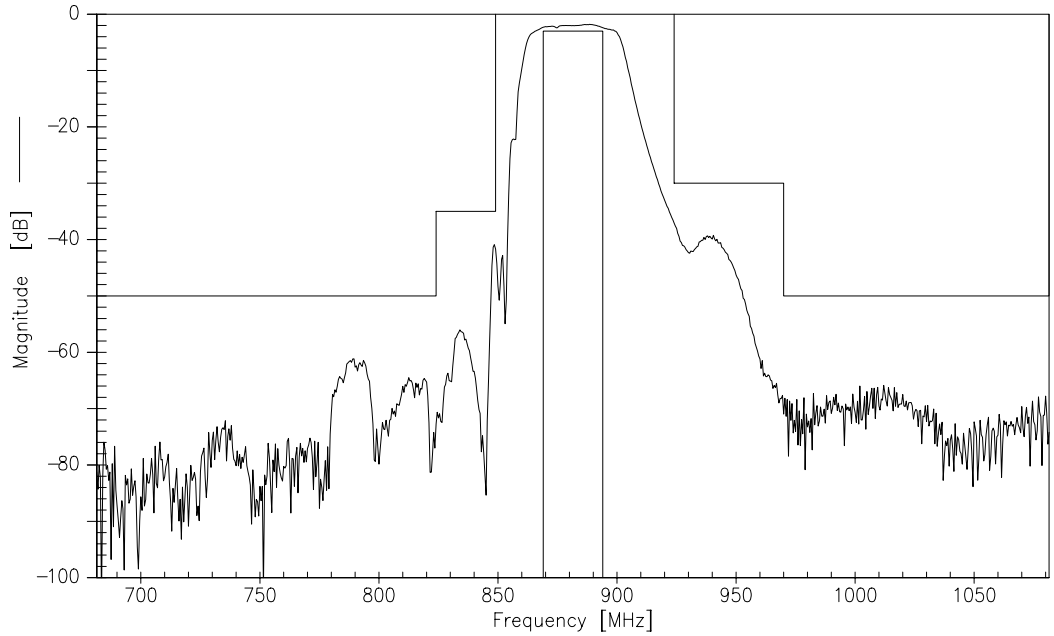
		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{max}				
869,0 ... 894,0 MHz		—	2,5	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	0,7	1,2	dB
VSWR					
869,0 ... 894,0 MHz		—	1,8	1,9	
Attenuation	α				
0,0 ... 824,0 MHz		50,0	60,0	—	dB
824,0 ... 849,0 MHz		35,0	40,0	—	dB
924,0 ... 970,0 MHz		30,0	40,0	—	dB
970,0 ...1300,0 MHz		50,0	65,0	—	dB
1300,0 ...2000,0 MHz		40,0	60,0	—	dB
2000,0 ...3000,0 MHz		30,0	50,0	—	dB

Characteristics

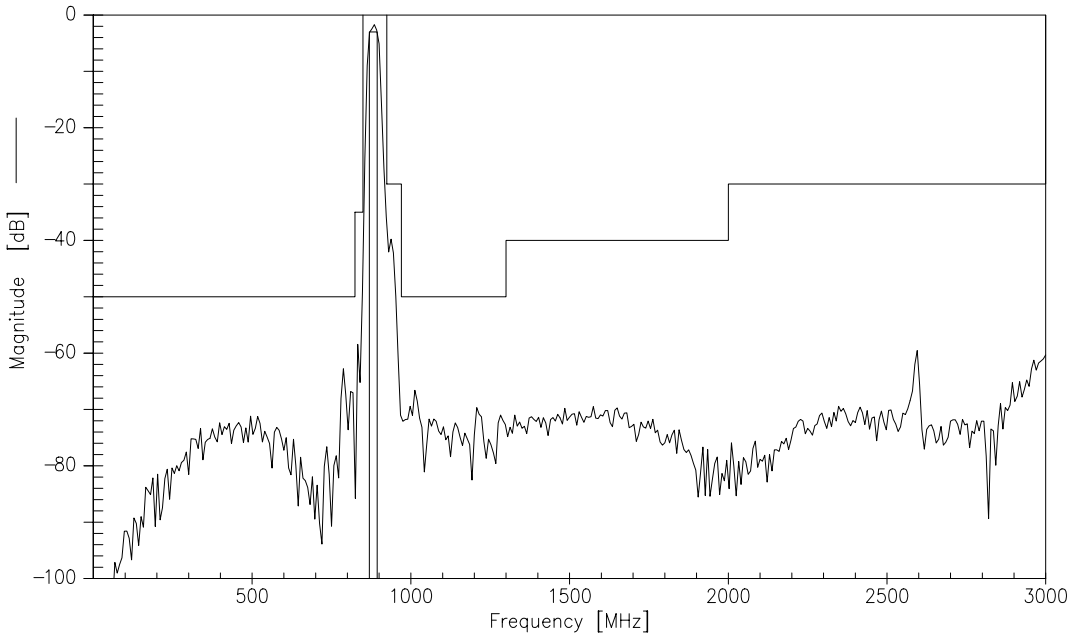
Operating temperature range: T = -40 to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 200 Ω || 68nH(balanced)

		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{max}				
869,0 ... 894,0 MHz		—	2,8	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	1,0	1,3	dB
VSWR					
869,0 ... 894,0 MHz		—	1,8	1,9	
Attenuation	α				
0,0 ... 824,0 MHz		50,0	60,0	—	dB
824,0 ... 849,0 MHz		35,0	40,0	—	dB
924,0 ... 970,0 MHz		30,0	40,0	—	dB
970,0 ...1300,0 MHz		50,0	65,0	—	dB
1300,0 ...2000,0 MHz		40,0	60,0	—	dB
2000,0 ...3000,0 MHz		30,0	50,0	—	dB

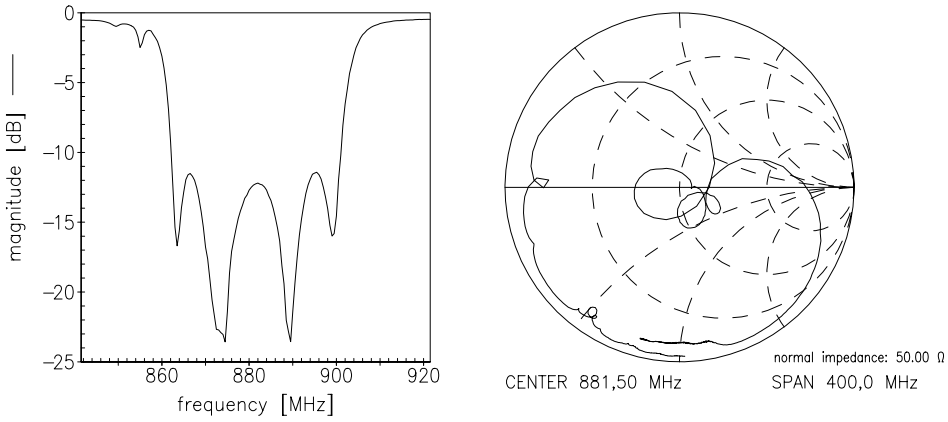
Transfer function



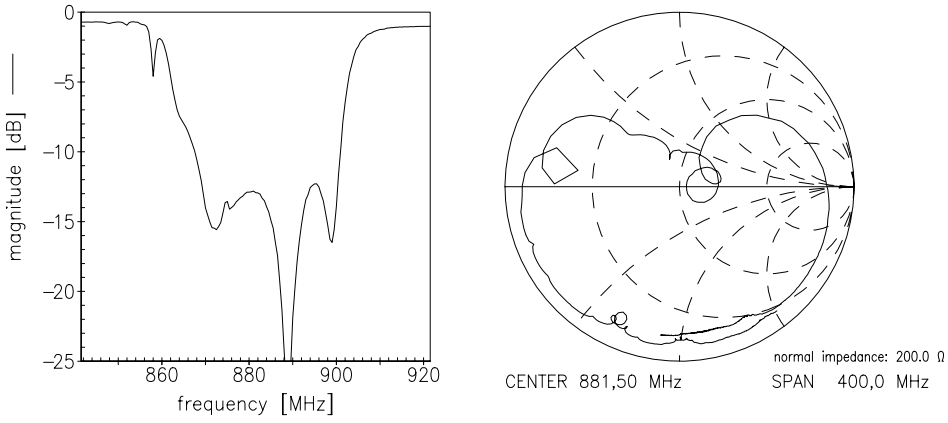
Transfer function



S_{11}


0
-5
-10
-15
-20
-25
magnitude [dB]
860
880
900
920
frequency [MHz]
normal impedance: 50.00 Ω
CENTER 881,50 MHz
SPAN 400,0 MHz

S_{22}


0
-5
-10
-15
-20
-25
magnitude [dB]
860
880
900
920
frequency [MHz]
normal impedance: 200.0 Ω
CENTER 881,50 MHz
SPAN 400,0 MHz

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

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This brochure replaces the previous edition.

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