



SAW Components

Data Sheet B4119

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns overlaid on it, all set against a dark, textured background.



SAW Components	B4119
Low-Loss Filter for Mobile Communication	942,5 MHz
Data Sheet	

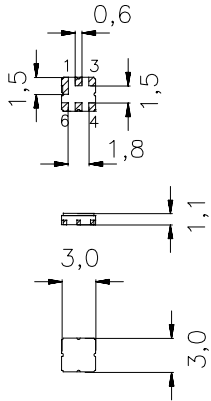
Ceramic package **DCC6D**

Features

- Low-loss RF filter for mobile telephone EGSM systems, receive path
- Low amplitude ripple
- Usable passband 35 MHz
- Unbalanced to balanced Operation
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

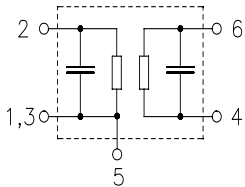
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

- 2 Input, unbalanced
- 4, 6 Balanced outputs
- 1, 3, 5 To be grounded
- 1, 3, 5 Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B4119	B39941-B4119-U510	C61157-A7-A68	F61074-V8089-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 80	°C	source and load impedance 50 Ω peak power of GSM signal, duty cycle 1 : 8 continuous wave
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	3	V	
Input power max.	P_{IN}	15	dBm	
880 ... 915 MHz				
elsewhere		0	dBm	



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Characteristics

Operating temperature range:	$T = 25 \pm 2 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 50 \text{ } \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	942,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
925,0 ... 960,0 MHz		—	2,7	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,0	2,0	dB
Attenuation	α				
0,0 ... 850,0 MHz		50	60	—	dB
850,0 ... 880,0 MHz		40	55	—	dB
880,0 ... 905,0 MHz		28	40	—	dB
905,0 ... 915,0 MHz		19	28	—	dB
980,0 ... 1050,0 MHz		22	25	—	dB
1050,0 ... 1680,0 MHz		45	53	—	dB
1680,0 ... 2000,0 MHz		40	45	—	dB
2000,0 ... 3000,0 MHz		30	40	—	dB
3000,0 ... 6000,0 MHz		15	25	—	dB



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Characteristics

Operating temperature range: $T = -20^{\circ}\text{C}$ to $+75^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	942,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
925,0 ... 960,0 MHz		—	3,1	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,4	2,5	dB
Attenuation	α				
0,0 ... 850,0 MHz		50	60	—	dB
850,0 ... 880,0 MHz		40	55	—	dB
880,0 ... 905,0 MHz		28	35	—	dB
905,0 ... 915,0 MHz		15	25	—	dB
980,0 ... 1050,0 MHz		20	23	—	dB
1050,0 ... 1680,0 MHz		45	53	—	dB
1680,0 ... 2000,0 MHz		40	45	—	dB
2000,0 ... 3000,0 MHz		30	40	—	dB
3000,0 ... 6000,0 MHz		15	25	—	dB



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Characteristics

Operating temperature range: $T = -30^{\circ}\text{C}$ to $+80^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	942,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
925,0 ... 960,0 MHz		—	3,3	4,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,6	2,8	dB
Attenuation	α				
0,0 ... 850,0 MHz		50	60	—	dB
850,0 ... 880,0 MHz		40	55	—	dB
880,0 ... 905,0 MHz		28	35	—	dB
905,0 ... 915,0 MHz		13	23	—	dB
980,0 ... 1050,0 MHz		19	22	—	dB
1050,0 ... 1680,0 MHz		45	53	—	dB
1680,0 ... 2000,0 MHz		40	45	—	dB
2000,0 ... 3000,0 MHz		30	40	—	dB
3000,0 ... 6000,0 MHz		15	25	—	dB



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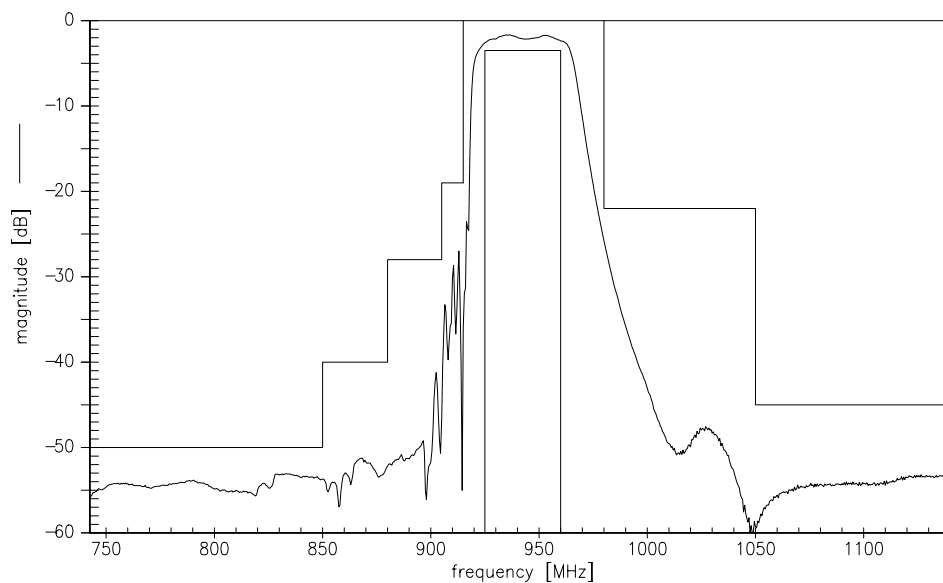
Low-Loss Filter for Mobile Communication

942,5 MHz

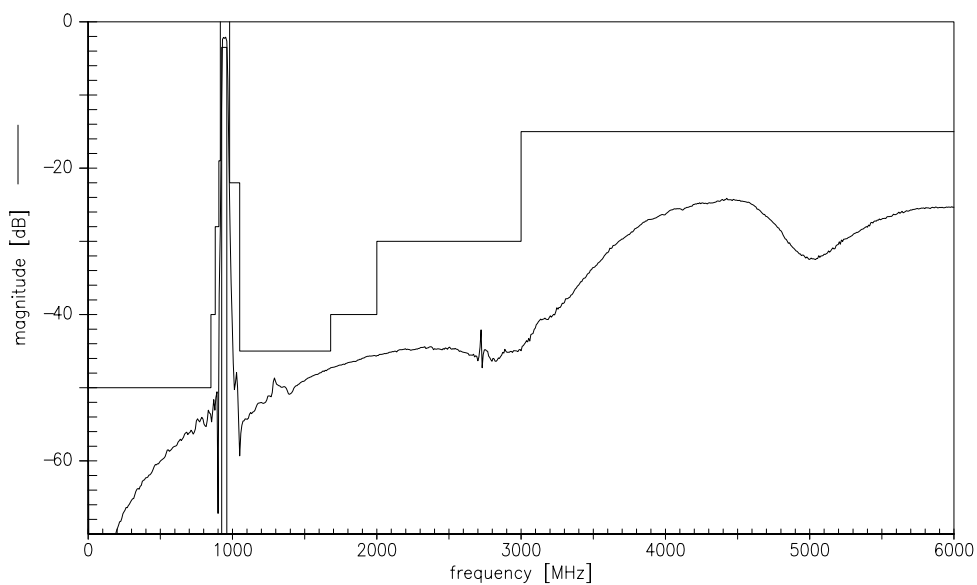
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Transfer function



Transfer function (wide band)





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Data Sheet	SMD

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

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