



SAW Components

Data Sheet B4143

Data Sheet

A large, stylized, 3D graphic of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a stylized globe or a series of overlapping planes. The graphic is in grayscale and has a metallic, reflective appearance.



SAW Components

B4143

Low-Loss Filter for Mobile Communication

1880,0 MHz

Data Sheet



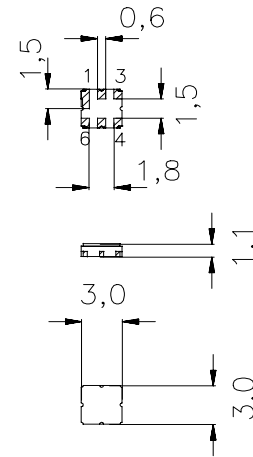
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**

Terminals

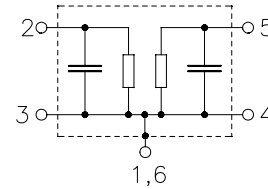
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
3	Input - ground
5	Output
4	Output - ground
1,6	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4143	B39192-B4143-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 /+ 85	$^{\circ}\text{C}$	source and load impedance 50 Ω peak power of TDMA signal, duty cycle 1 : 3 continuous wave
Storage temperature range	T_{stg}	- 40 /+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power max. 1850...1910 MHz	P_{IN}	13	dBm	
		10	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: $Z_L = 50 \text{ } \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1880,0	—	MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1910,0 MHz		—	3,2	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1910,0 MHz		—	1,7	2,5	dB
Input VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Output VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Attenuation	α					
	10,0 ... 1570,0 MHz		23,0	26,0	—	dB
	1570,0 ... 1720,0 MHz		33,0	35,0	—	dB
	1930,0 ... 1935,0 MHz		15,0	24,0	—	dB
	1935,0 ... 1990,0 MHz		20,0	27,0	—	dB
	2032,0 ... 2125,0 MHz		35,0	36,5	—	dB
	2125,0 ... 2340,0 MHz		35,0	37,0	—	dB
	2340,0 ... 3000,0 MHz		30,0	39,0	—	dB
	3000,0 ... 3500,0 MHz		15,0	24,0	—	dB



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Characteristics

Operating temperature range: $T = -10$ to $+70$ °C
Terminating source impedance: $Z_S = 50 \Omega$
Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1880,0	—	MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1910,0 MHz		—	3,5	4,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1910,0 MHz		—	2,0	3,1	dB
Input VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Output VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Attenuation	α					
	10,0 ... 1448,0 MHz		23,0	26,0	—	dB
	1448,0 ... 1570,0 MHz		30,0	32,0	—	dB
	1570,0 ... 1720,0 MHz		33,0	35,0	—	dB
	1930,0 ... 1935,0 MHz		14,5	22,0	—	dB
	1935,0 ... 1990,0 MHz		20,0	25,0	—	dB
	2032,0 ... 2125,0 MHz		35,0	36,5	—	dB
	2125,0 ... 2340,0 MHz		35,0	37,0	—	dB
	2340,0 ... 3000,0 MHz		30,0	39,0	—	dB
	3000,0 ... 3500,0 MHz		15,0	24,0	—	dB



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Characteristics

Operating temperature range: $T = -30$ to $+85$ °C
Terminating source impedance: $Z_S = 50 \Omega$
Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1880,0	—	MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1910,0 MHz		—	3,5	5,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1910,0 MHz		—	2,0	3,5	dB
Input VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Output VSWR						
	1850,0 ... 1910,0 MHz		—	2,0	2,2	
Attenuation	α					
	10,0 ... 1570,0 MHz		23,0	26,0	—	dB
	1570,0 ... 1720,0 MHz		33,0	35,0	—	dB
	1930,0 ... 1935,0 MHz		13,0	22,0	—	dB
	1935,0 ... 1990,0 MHz		20,0	25,0	—	dB
	2032,0 ... 2125,0 MHz		35,0	36,5	—	dB
	2125,0 ... 2340,0 MHz		35,0	37,0	—	dB
	2340,0 ... 3000,0 MHz		30,0	39,0	—	dB
	3000,0 ... 3500,0 MHz		15,0	24,0	—	dB



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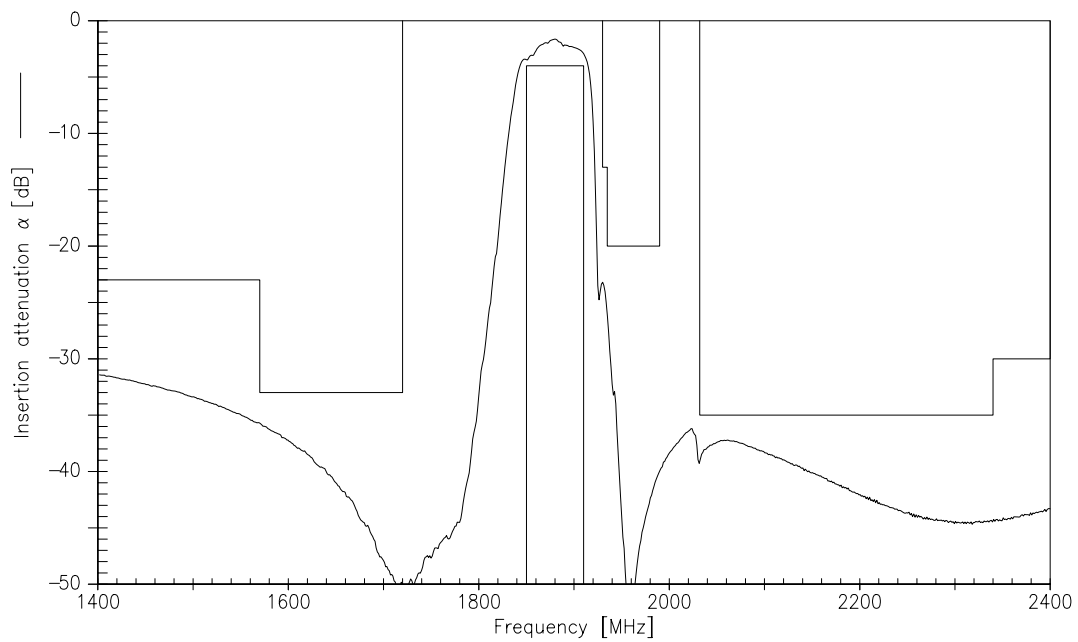
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1880,0 MHz

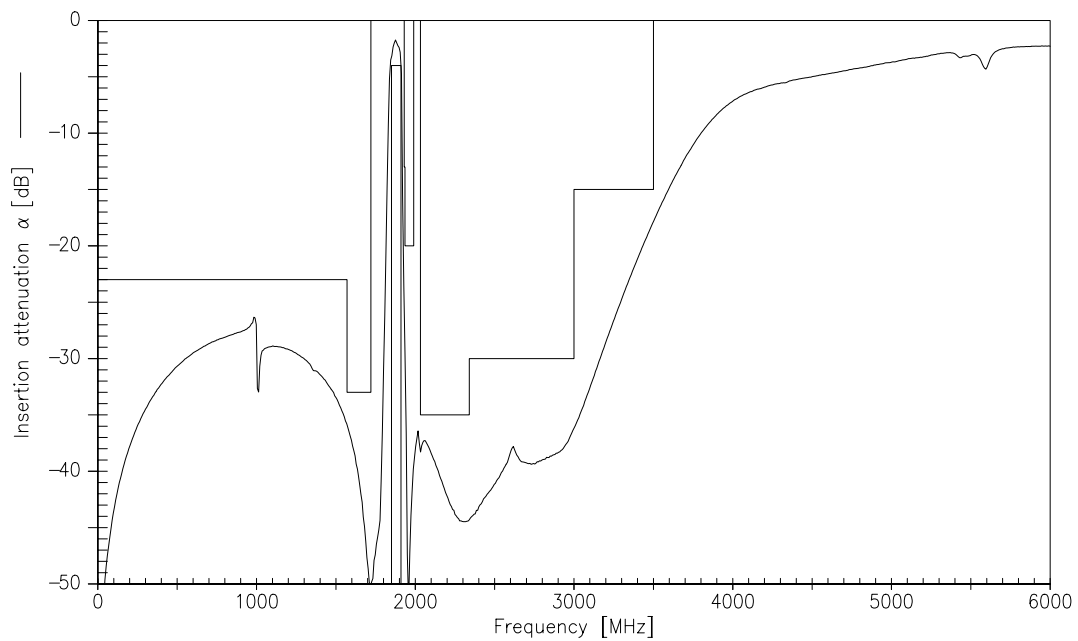
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Transfer function (25°C spec)



Transfer function (wideband)





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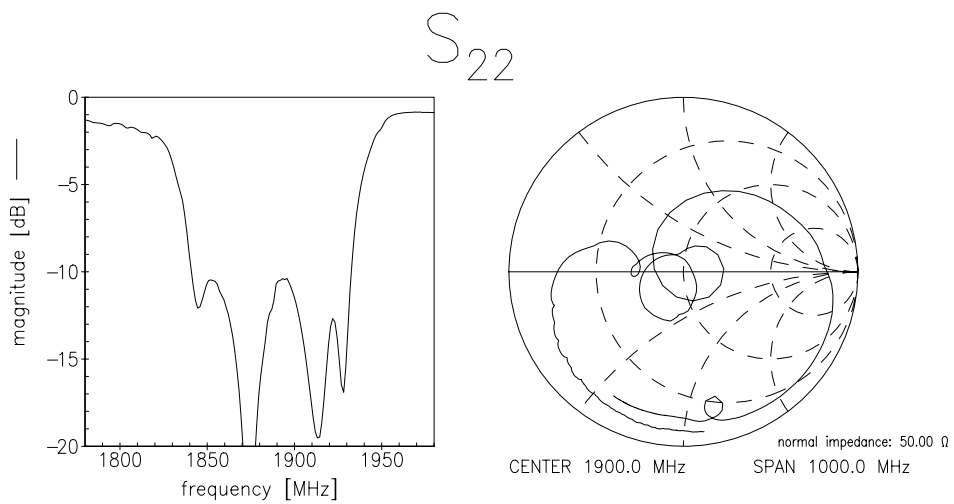
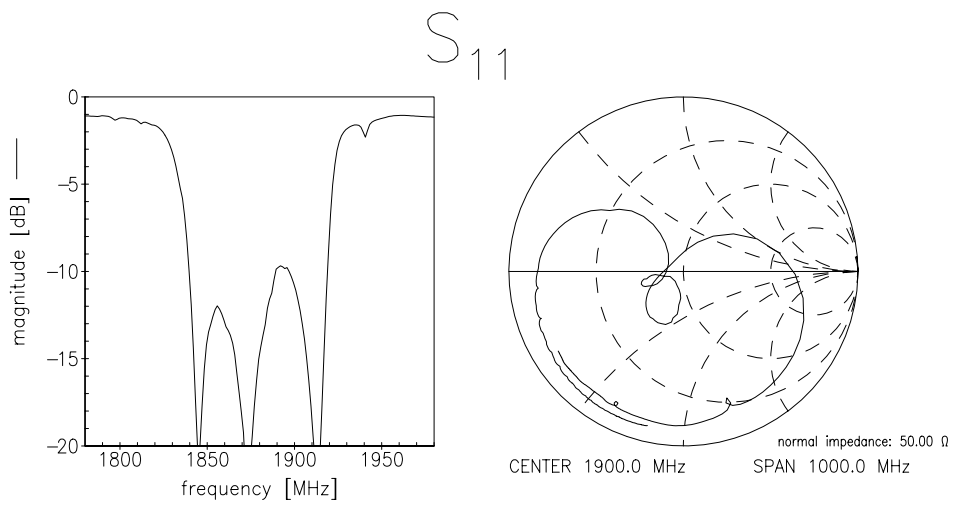
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Reflection function





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