EPCOS

SAW Components

Data Sheet B4138

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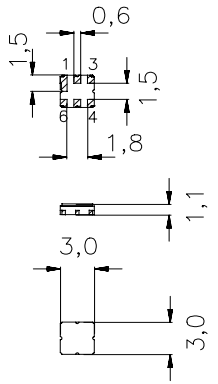
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- Low amplitude ripple
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)



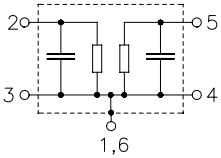
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
1, 3	Ground
5	Output
4, 6	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B4138	B39192-B4138-U410	C61157-A7-A67	F61074-V8088-Z000

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

Maximum ratings

Operable temperature range	T	– 30/+ 80	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	CDMA signal

Data Sheet SMD

Characteristics

Operating temperature range: T = 25 +-2 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

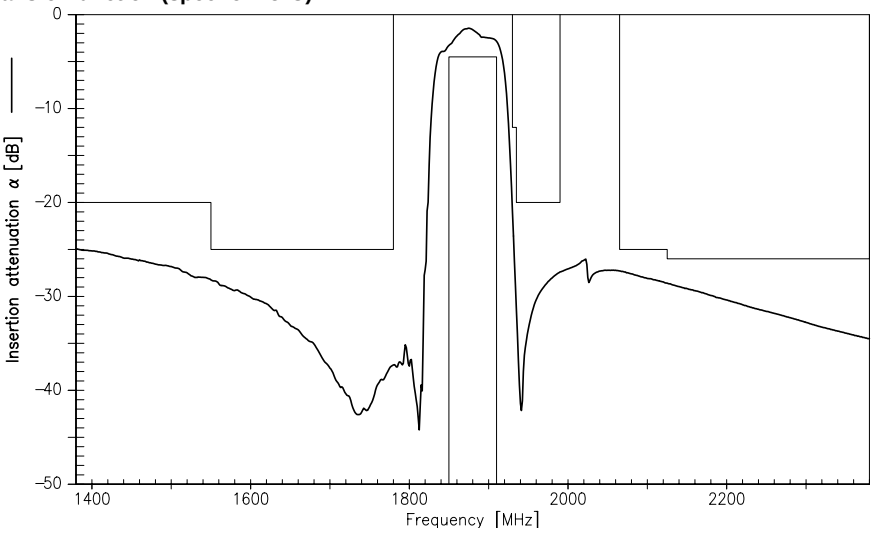
		min.	typ.	max.	
Center frequency	f_c	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,0 ...1910,0 MHz		—	3,3	3,9	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,0 ...1910,0 MHz		—	1,7	2,5	dB
Input VSWR					
1850,0 ...1910,0 MHz		—	2,0	2,2	
Output VSWR					
1850,0 ...1910,0 MHz		—	2,1	2,3	
Attenuation	α				
10,0 ...1550,0 MHz		20,0	22,0	—	dB
1550,0 ...1780,0 MHz		25,0	28,0	—	dB
1930,0 ...1935,0 MHz		12,0	22,0	—	dB
1935,0 ...1990,0 MHz		20,0	26,0	—	dB
2065,0 ...2150,0 MHz		25,0	28,0	—	dB
2150,0 ...2500,0 MHz		26,0	29,0	—	dB
2500,0 ...5000,0 MHz		15,0	17,0	—	dB

Characteristics

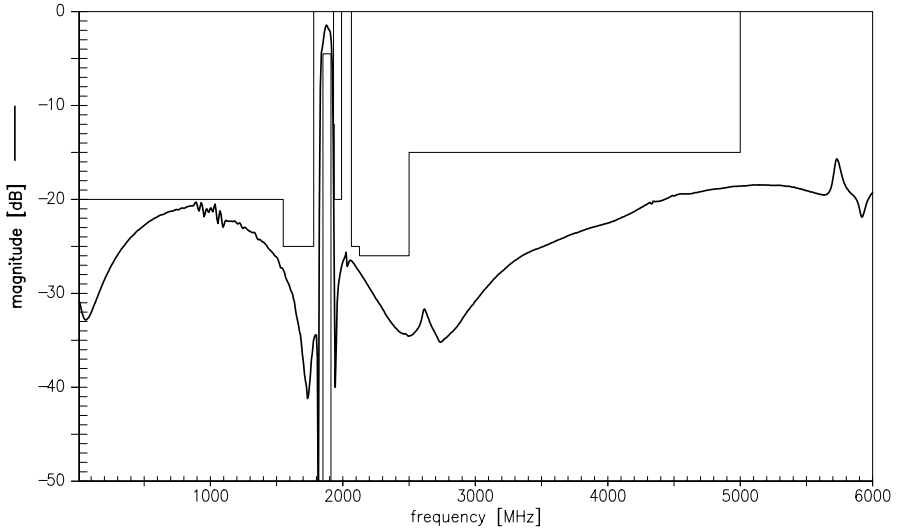
Operating temperature range: T = -30 to 80 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,0 ...1910,0 MHz		—	3,3	4,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,0 ...1910,0 MHz		—	1,8	3,0	dB
Input VSWR					
1850,0 ...1910,0 MHz		—	2,0	2,2	
Output VSWR					
1850,0 ...1910,0 MHz		—	2,1	2,3	
Attenuation	α				
10,0 ...1550,0 MHz		20,0	22,0	—	dB
1550,0 ...1780,0 MHz		25,0	28,0	—	dB
1930,0 ...1935,0 MHz		8,5	22,0	—	dB
1935,0 ...1990,0 MHz		14,0	26,0	—	dB
2065,0 ...2150,0 MHz		25,0	28,0	—	dB
2150,0 ...2500,0 MHz		26,0	29,0	—	dB
2500,0 ...5000,0 MHz		15,0	17,0	—	dB

Transfer function (spec for 25˚C)

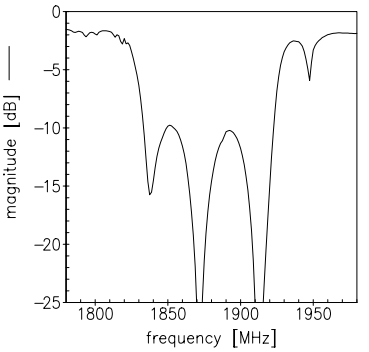


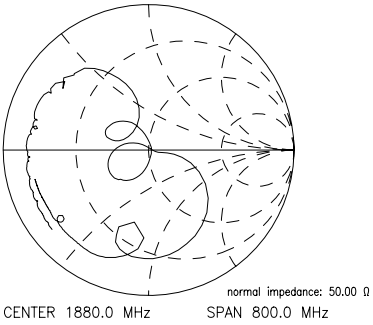
Transfer function (wideband)



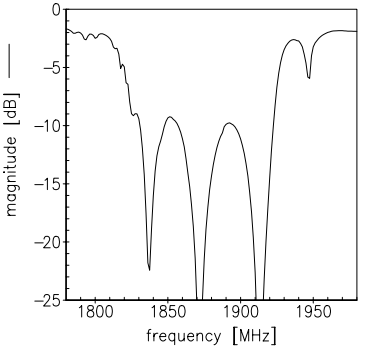
Reflection functions

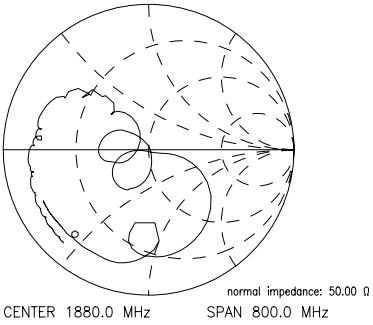
S_{11}





S_{22}





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