EPCOS

SAW Components

Data Sheet B7803

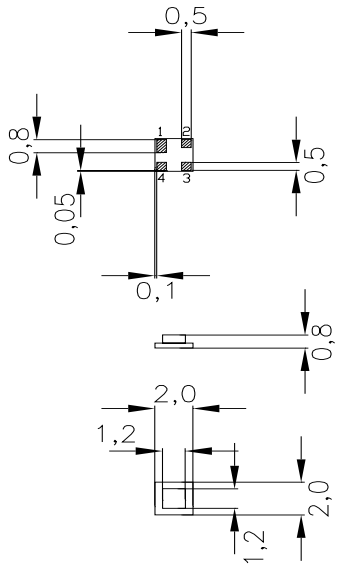
Chip sized SAW package DCS4A

Features

- Low-loss RF filter for W-CDMA system, transmit path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for **S**urface **M**ounted technology (**SMT)**

Terminals

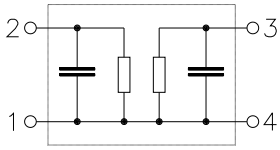
- Ni, gold-plated



Dimensions in mm, approx. weight 0,019 g

Pin configuration

2	Input
1	Input - ground
3	Output
4	Output - ground



Type	Ordering code	Marking and Package according to	Packing according to
B7803	B39202-B7803-A510	C61157-A7-A63	F61074-V8099-Z000

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

Maximum ratings

Operable temperature range	T	– 20/+ 85	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	source impedance 50 Ω

Data Sheet SMD

Characteristics

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

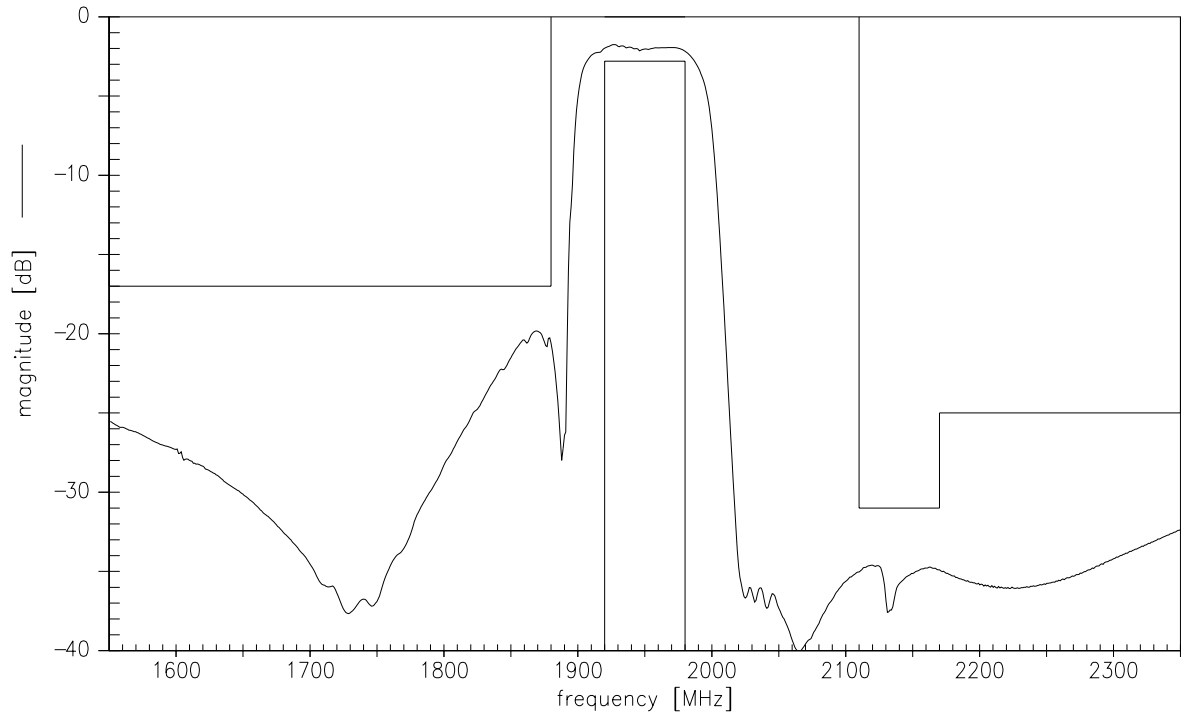
		min.	typ.	max.	
Center frequency	f_c	—	1950,0	—	MHz
Maximum insertion attenuation	α_{max}				
1920,0 ...1980,0 MHz		—	2,3	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1920,0 ...1980,0 MHz		—	0,5	0,7	dB
Amplitude ripple (p-p) **per 5-MHz channel**	$\Delta\alpha_{ch}$				
1920,0 ...1980,0 MHz		—	0,2	0,4	dB
Input VSWR					
1920,0 ...1980,0 MHz		—	1,8	2,0	
Output VSWR					
1920,0 ...1980,0 MHz		—	1,8	2,0	
Attenuation	α				
50,0 ...1805,0 MHz		17,0	18,0	—	dB
1805,0 ...1880,0 MHz		17,0	20,0	—	dB
2110,0 ...2170,0 MHz		31,0	35,0	—	dB
2170,0 ...2500,0 MHz		25,0	27,0	—	dB
2500,0 ...2800,0 MHz		20,0	23,0	—	dB
2800,0 ...6000,0 MHz		12,0	15,0	—	dB

Characteristics

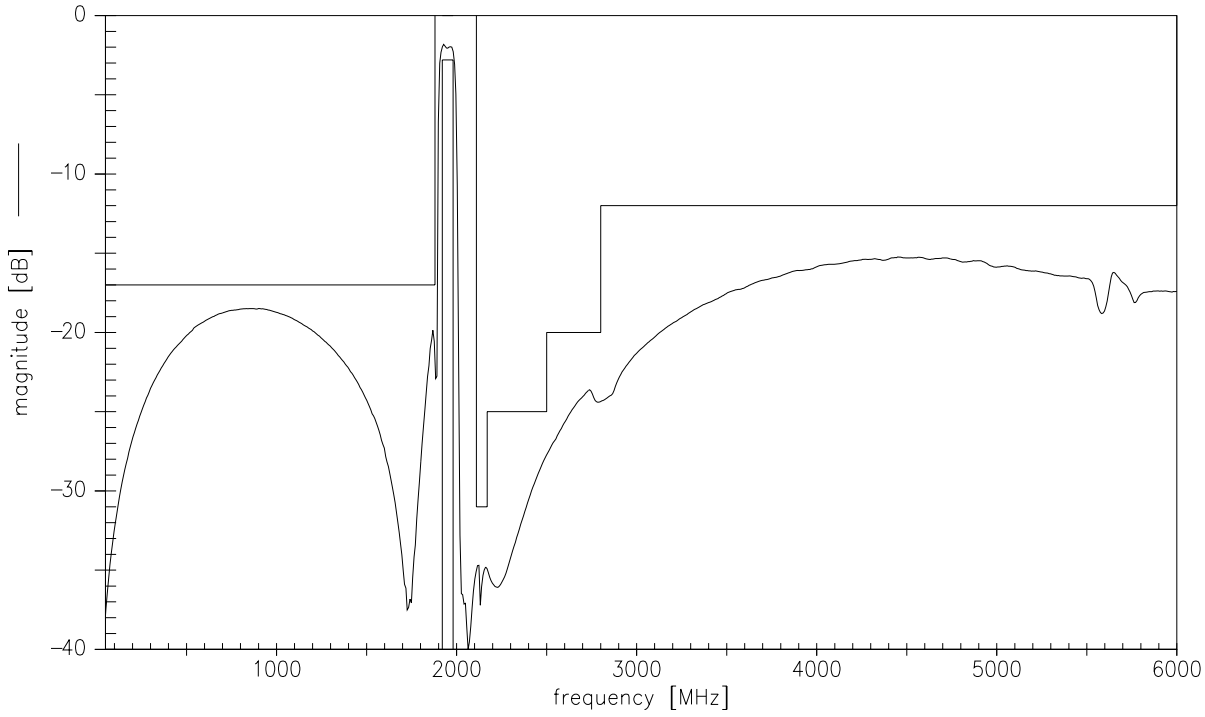
Operating temperature range: T = -20 to +85°C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	1950,0	—	MHz
Maximum insertion attenuation	α_{max}				
1920,0 ...1980,0 MHz		—	2,5	2,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1920,0 ...1980,0 MHz		—	0,7	1,0	dB
Amplitude ripple (p-p) **per 5-MHz channel**	$\Delta\alpha_{ch}$				
1920,0 ...1980,0 MHz		—	0,4	0,5	dB
Input VSWR					
1920,0 ...1980,0 MHz		—	1,8	2,0	
Output VSWR					
1920,0 ...1980,0 MHz		—	1,8	2,0	
Attenuation	α				
50,0 ...1805,0 MHz		17,0	18,0	—	dB
1805,0 ...1880,0 MHz		17,0	20,0	—	dB
2110,0 ...2170,0 MHz		31,0	35,0	—	dB
2170,0 ...2500,0 MHz		25,0	27,0	—	dB
2500,0 ...2800,0 MHz		20,0	23,0	—	dB
2800,0 ...6000,0 MHz		12,0	15,0	—	dB

Frequency response (narrow band)



Frequency response (broad band)



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