



SAW Components

Data Sheet B3501





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B3501

Low-Loss Filter for Mobile Communication

183,6 MHz

Data Sheet



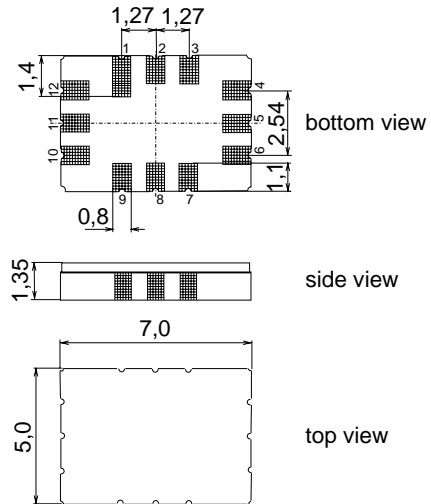
Features

- IF filter for mobile telephone
- Channel selection in CDMA systems
- Balanced or unbalanced
- High rejection, very small size
- Low amplitude ripple
- Package for **Surface Mounted Technology (SMT)**
- Filter surface passivated

Terminals

- Ni, gold plated

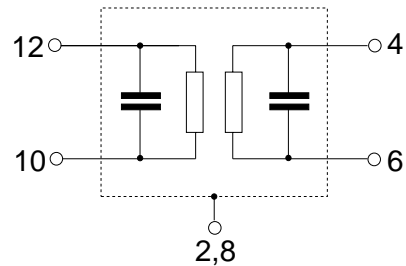
SMD ceramic package QCC12E



Dimensions in mm, approx. weight 0,25 g

Pin configuration

- | | |
|------------------|---------------------------|
| 12 | Input |
| 10 | Balanced input or ground |
| 6 | Output |
| 4 | Balanced output or ground |
| 1, 2, 3, 7, 8, 9 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B3501	B39181-B3501-H810	C61157-A7-A103	F61074-V8170-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	



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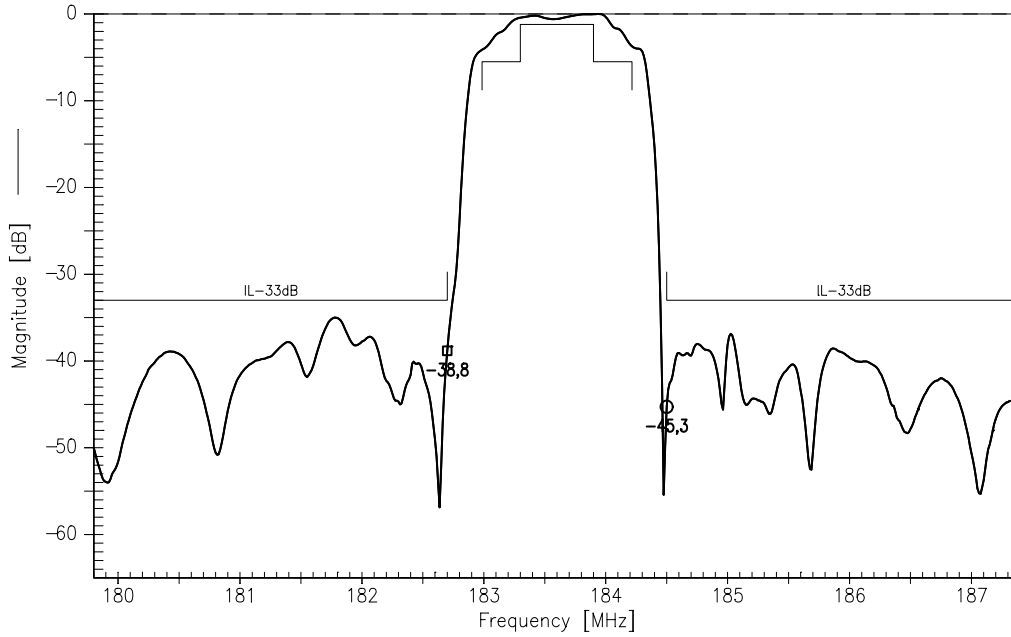
Characteristics

Specified temperature range: $T = -30^{\circ}\text{C} \dots +85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 300\Omega \parallel 44\text{nH}$
 Terminating load impedance: $Z_L = 675\Omega \parallel 54\text{nH}$

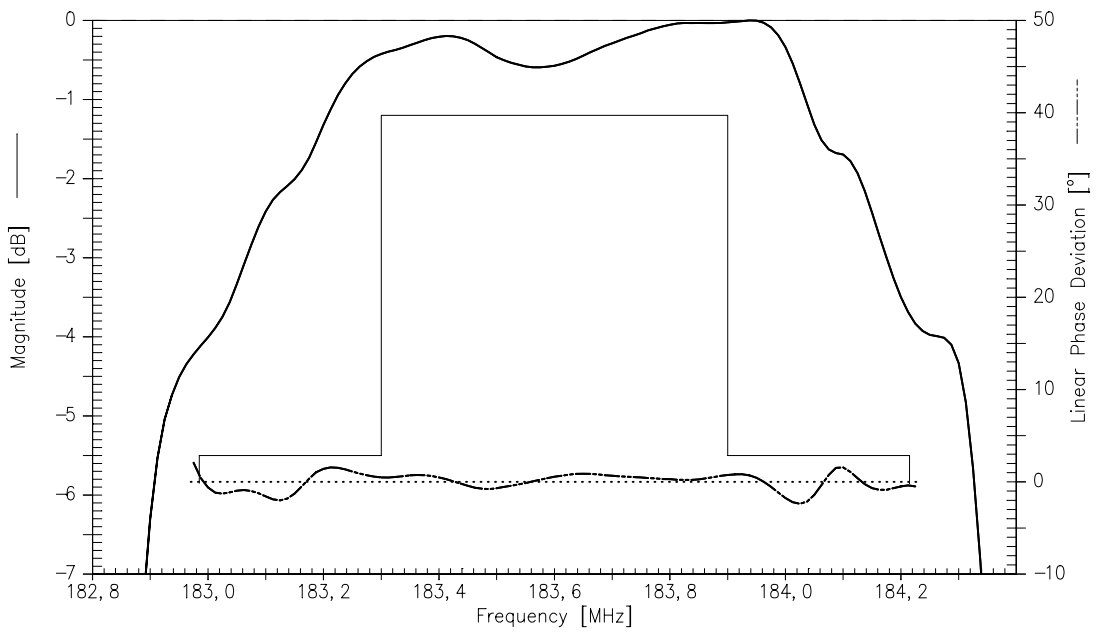
		min.	typ.	max.	
Nominal frequency	f_N	—	183,6	—	MHz
Minimum insertion attenuation (including loss in matching network without loss in balun)	α_{\min}	—	8,1	9,5	dB
Amplitude ripple	$\Delta\alpha$				
$f_N - 0,3 \text{ MHz} \dots f_N + 0,3 \text{ MHz}$		—	0,6	1,2	dB
Phase linearity (rms deviation)					
$f_N - 0,615\text{MHz} \dots f_N + 0,615 \text{ MHz}$		—	1,3	2,8	°
Relative attenuation (relative to α_{\min})	α_{rel}				
$f_N \pm 0,615\text{MHz}$		—	4,0	5,5	dB
$f_N - 0,9 \text{ MHz}$		33	39	—	dB
$f_N + 0,9 \text{ MHz}$		33	45	—	dB
$f_N - 1,25 \text{ MHz}$		33	44	—	dB
$f_N + 1,25 \text{ MHz}$		33	39	—	dB
$f_N - 1,7 \text{ MHz}$		33	37	—	dB
$f_N + 1,7 \text{ MHz}$		33	43	—	dB
$f_N \pm 2,05 \text{ MHz}$		33	42	—	dB
$f_N - 9,0 \text{ MHz} \dots f_N - 1,25 \text{ MHz}$		33	35	—	dB
$f_N + 1,25 \text{ MHz} \dots f_N + 9,0 \text{ MHz}$		33	37	—	dB



Normalized transfer function (measurement):



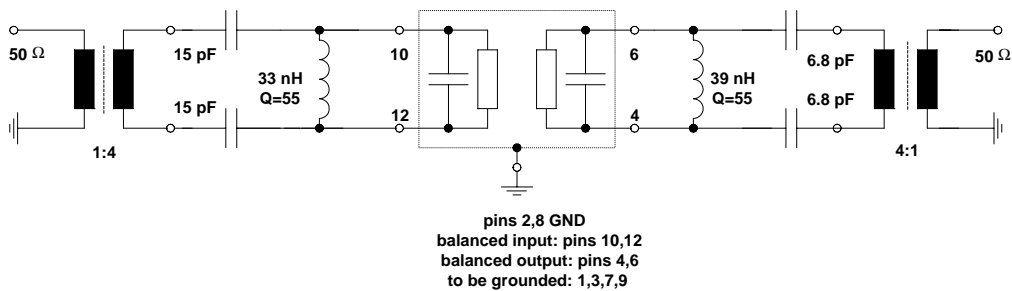
Normalized transfer function (measurement, passband):





Test matching network

(Element values depend on pcb layout)



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