



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





SAW Components

Data Sheet B3831

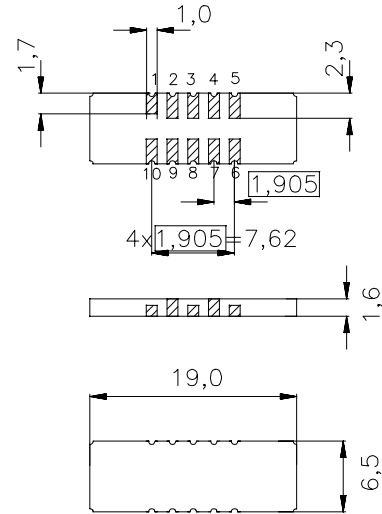


Data Sheet
Features

- Low-loss IF filter for CDMA base station
- Temperature stable
- Ceramic SMD package
- Unbalanced or balanced operation

Terminals

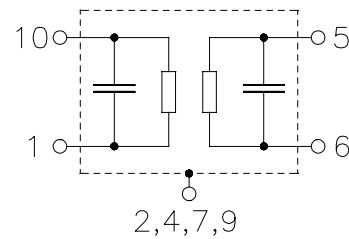
- Gold plated

Ceramic package DCC18


Dimensions in mm, approx. weight 0,8 g

Pin configuration

10	Input or balanced input
1	Input ground or balanced input
5	Output or balanced output
6	Output ground or balanced output
3, 8	Ground
2, 4, 7, 9	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B3831	B39151-B3831-U210	C61157-A7-A54	F61074-V8081-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	0	dBm	



SAW Components

B3831

Low-Loss Filter

150,0 MHz

Data Sheet

Characteristics

Operating temperature range: $T = -40$ to $+85$ °C
 Terminating source impedance: $Z_S = 1000 \Omega \parallel 87\text{nH}$
 Terminating load impedance: $Z_L = 1000 \Omega \parallel 73\text{nH}$

			min.	typ.	max.	
Nominal frequency	f_N	—	150	—	—	MHz
Minimum insertion attenuation	α_{\min}	—	16,5	18	—	dB
1dB bandwidth	$\alpha_{\text{rel}} \leq 1,0$ dB	$B_{1,0\text{dB}}$	1,29	1,45	—	MHz
Amplitude ripple (p-p)	$f_N \pm 615$ kHz	$\Delta\alpha$	—	0,5	1,0	dB
Phase linearity (p-p)	$f_N \pm 615$ kHz	$\Delta\phi$	—	3,7	5,0	deg
Relative attenuation (relative to α_{\min})	$f_N \pm 2,25$ MHz ... $f_N \pm 40,0$ MHz	α_{rel}	30	42	—	dB
VSWR	$f_N \pm 615$ kHz	—	—	1,4:1	1,6:1	—
Temperature coefficient of frequency ¹⁾	TC_f	—	—	-0,036	—	ppm/K ²
Turnover temperature	T_0	—	—	35	—	°C

¹⁾ Temperature dependance of f_c : $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



SAW Components

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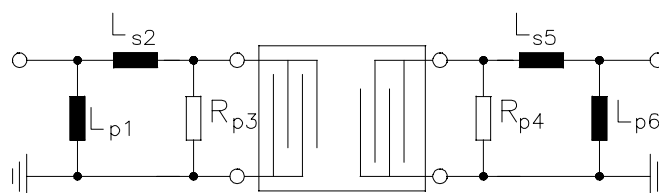
Low-Loss Filter

150,0 MHz

Data Sheet

Matching network to 50 Ω

(Element values depend on PCB layout)



$L_{p1} = 27\text{nH}$

$R_{p4} = 820\Omega$

$L_{s2} = 56\text{nH}$

$L_{s5} = 56\text{nH}$

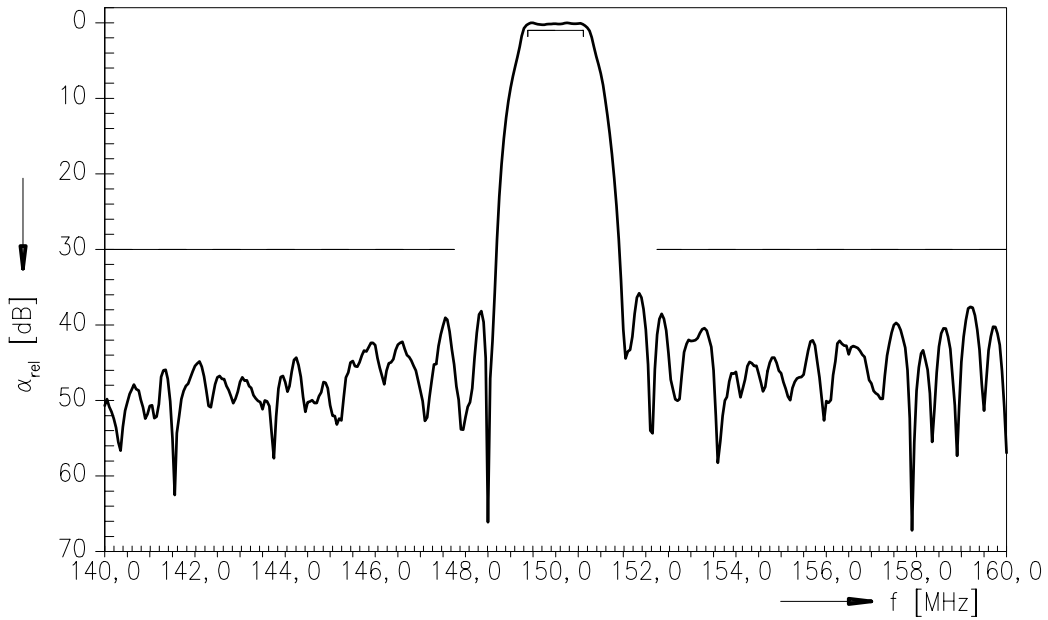
$R_{p3} = 1000\Omega$

$L_{p6} = 33\text{nH}$

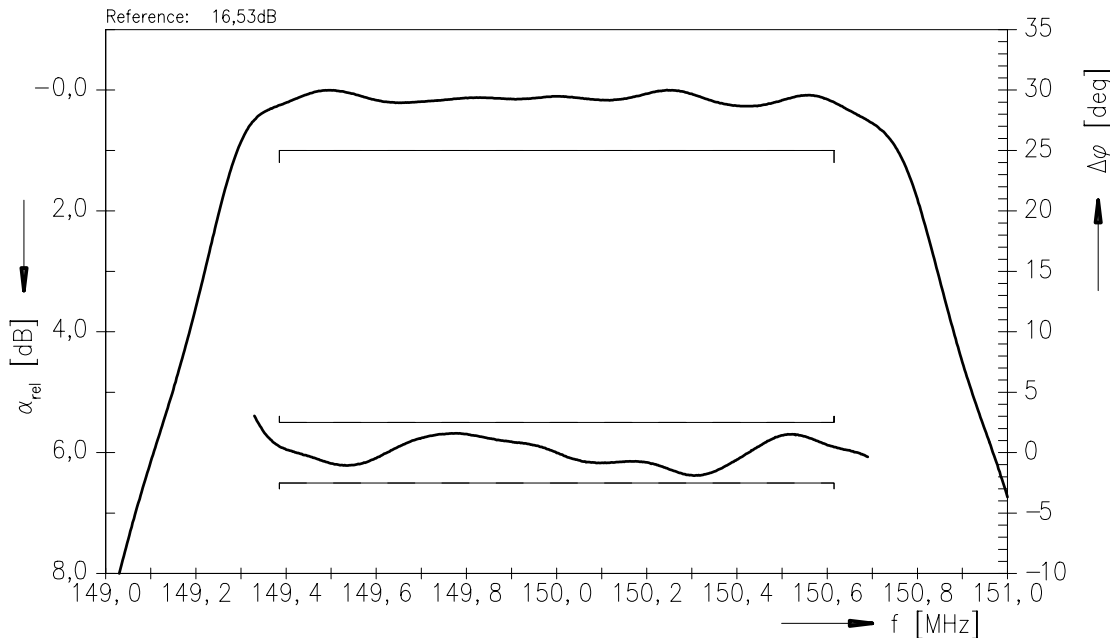


Data Sheet

Normalized frequency response



Normalized frequency response (pass band)





SAW Components	B3831
Low-Loss Filter	150,0 MHz

Data Sheet

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SAW MC IS, P.O. Box 80 17 09, 81617 Munich, GERMANY

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