



SAW Components

Data Sheet B4957

Data Sheet

A large, stylized, 3D graphic of the word "EPCOS" in a light gray, sans-serif font. The letters are tilted and appear to be floating or emerging from a dark, textured background that resembles a globe or a complex circuit pattern.



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Low-Loss Filter for Mobile Communication

128,1 MHz

Data Sheet



Operating temperature range: $T = -30^{\circ}\text{C} \dots +85^{\circ}\text{C}$
Terminating source impedance: $Z_S = 1370 \Omega \parallel 170 \text{ nH}$
Terminating load impedance: $Z_L = 760 \Omega \parallel 119 \text{ nH}$

		min.	typ.	max.	
Nominal frequency	f_N	—	128,1	—	MHz
Minimum insertion attenuation (including loss in matching network without loss in balun)	α_{\min}	—	9,2	10,5	dB
Amplitude ripple	$\Delta\alpha$				
$f_N - 0,3 \text{ MHz} \dots f_N + 0,3 \text{ MHz}$		—	0,6	1,0	dB
Phase linearity (rms deviation)					
$f_N - 0,615 \text{ MHz} \dots f_N + 0,615 \text{ MHz}$		—	1,6	3,0	°
Relative attenuation (relative to α_{\min})	α_{rel}				
$f_N \pm 0,615 \text{ MHz}$		—	4,0	4,5	dB
10,0 MHz ... $f_N - 5,0 \text{ MHz}$		45 ¹⁾	48	—	dB
$f_N - 5,0 \text{ MHz} \dots f_N - 0,9 \text{ MHz}$		37	39	—	dB
$f_N - 2,05 \text{ MHz}$		37	49	—	dB
$f_N - 1,7 \text{ MHz}$		37	44	—	dB
$f_N - 1,25 \text{ MHz}$		37	52	—	dB
$f_N - 0,9 \text{ MHz}$		37	43	—	dB
$f_N + 0,9 \text{ MHz}$		37	40	—	dB
$f_N + 1,25 \text{ MHz}$		37	53	—	dB
$f_N + 1,7 \text{ MHz}$		37	44	—	dB
$f_N + 2,05 \text{ MHz}$		37	54	—	dB
$f_N + 0,9 \text{ MHz} \dots f_N + 5,0 \text{ MHz}$		37	40	—	dB
$f_N + 5,0 \text{ MHz} \dots f_N + 70,0 \text{ MHz}$		45 ²⁾	48	—	dB
172,485 MHz ... 173,715 MHz		60	75	—	dB
207,485 MHz ... 208,715 MHz		48	50	—	dB

1) exception: 122,1 MHz +/- 200 kHz

2) exception: 135,2 MHz +/- 300 kHz



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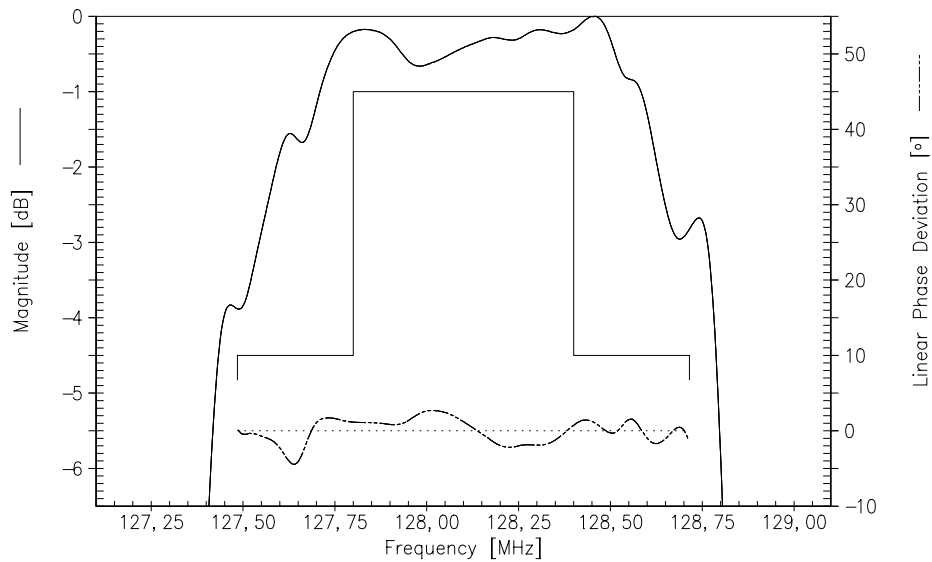
Low-Loss Filter for Mobile Communication

128,1 MHz

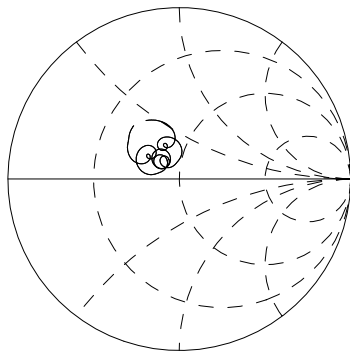
Data Sheet



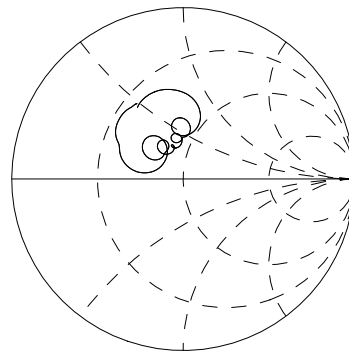
Transfer function: passband, single ended (pin 5) - balanced (pins 9,10)



output reflection



input reflection





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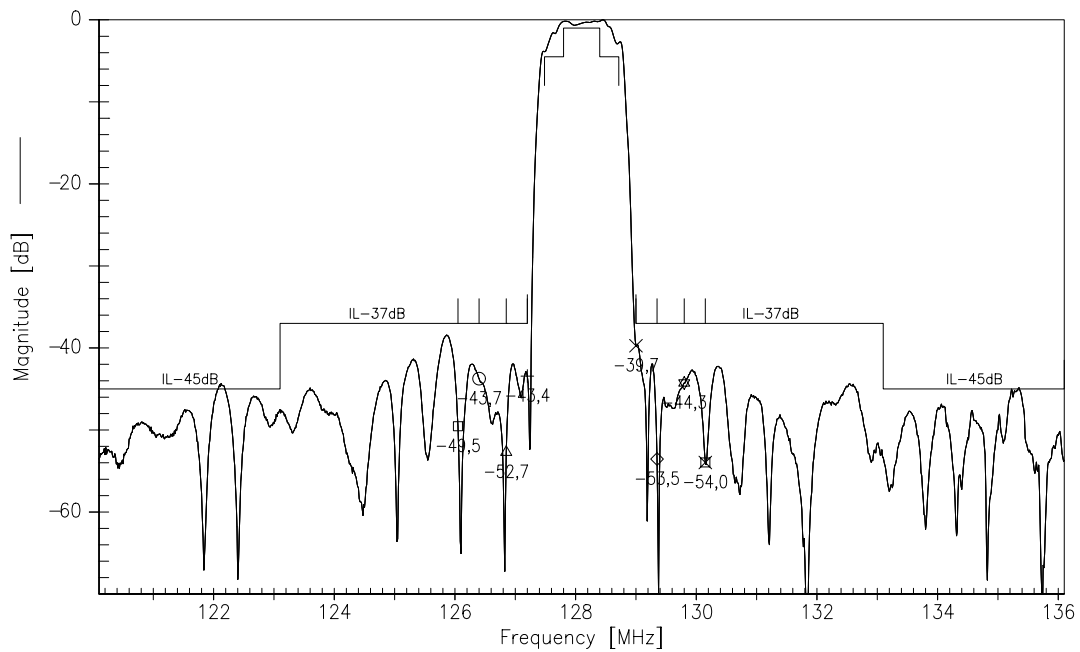
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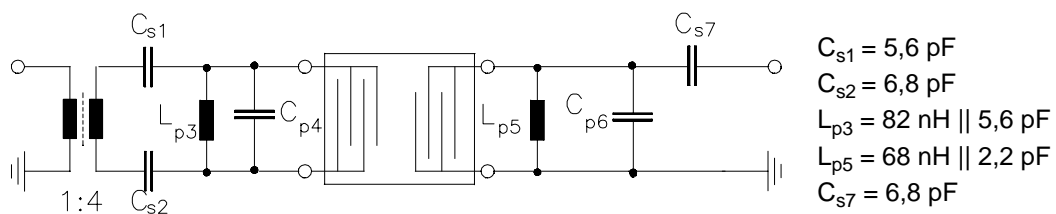


Transfer function: wide band, single ended (pin 5) - balanced (pins 9,10)



Test matching network to 50Ω

(Element values depend on pcb layout. Input is at the right hand side)





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Low-Loss Filter for Mobile Communication	128,1 MHz
Data Sheet	SMD

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