



SAW Components

Data Sheet B3647

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.



SAW Components

B3647

Low-Loss Filter

125,0 MHz

Data Sheet

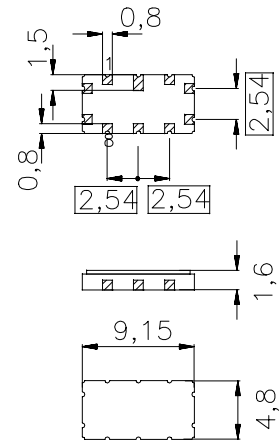
Ceramic package **QCC10B**

Features

- Low-loss wideband IF filter
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)

Terminals

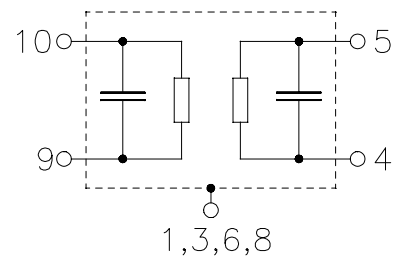
- Gold-plated



Dimensions in mm, approx. weight 0,2 g

Pin configuration

10	Input
9	Input ground
5	Output
4	Output ground
2, 7	Ground
1, 3, 6, 8	Case – ground



Type	Ordering code	Marking and Package according to	Packing according to
B3647	B39131-B3647-Z710	C61157-A7-A49	F61064-V8035-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 25/+ 85	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	- 40/+ 125	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Source power	P_{s}	10	dBm	



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Characteristics

Operating temperature:	$T_A = -10 - +85\text{ °C}$
Terminating source impedance:	$Z_S = 50\ \Omega$
Terminating load impedance:	$Z_L = 50\ \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	125,0	—	MHz
Minimum insertion attenuation	α_{\min}	—	1,5	3,0	dB
Passband width	$B_{1,0dB}$	—	2,2	—	MHz
	$\alpha_{\text{rel}} \leq 1,0\text{ dB}$	—	2,2	—	MHz
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,35	1,0	dB
	$f_N \pm 150\text{ kHz}$	—	0,35	1,0	dB
Absolute group delay (at f_N)	τ	—	250	300	ns
Group delay ripple (p-p)	$\Delta\tau$	—	20	30	ns
	$f_N \pm 150\text{ kHz}$	—	20	30	ns
Relative attenuation (relative to α_{\min})	α_{rel}				
10,0 MHz ... $f_N - 28,0\text{ MHz}$		12,0	70,0	—	dB
$f_N - 28,0\text{ MHz}$... $f_N - 14,0\text{ MHz}$		5,0	50,0	—	dB
$f_N - 14,0\text{ MHz}$... $f_N - 0,15\text{ MHz}$		0,0	2,0	—	dB
$f_N + 0,15\text{ MHz}$... $f_N + 14,0\text{ MHz}$		0,0	2,0	—	dB
$f_N + 14,0\text{ MHz}$... $f_N + 28,0\text{ MHz}$		30,0	50,0	—	dB
$f_N + 28,0\text{ MHz}$... $f_N + 325,0\text{ MHz}$		38,0	46,0	—	dB
Input IP3 (Third order intercept point)		60	—	—	dBm
VSWR	$f_N \pm 150\text{ kHz}$	—	1,4:1	2,0:1	
Temperature coefficient of frequency	TC_f	—	-70	—	ppm/K



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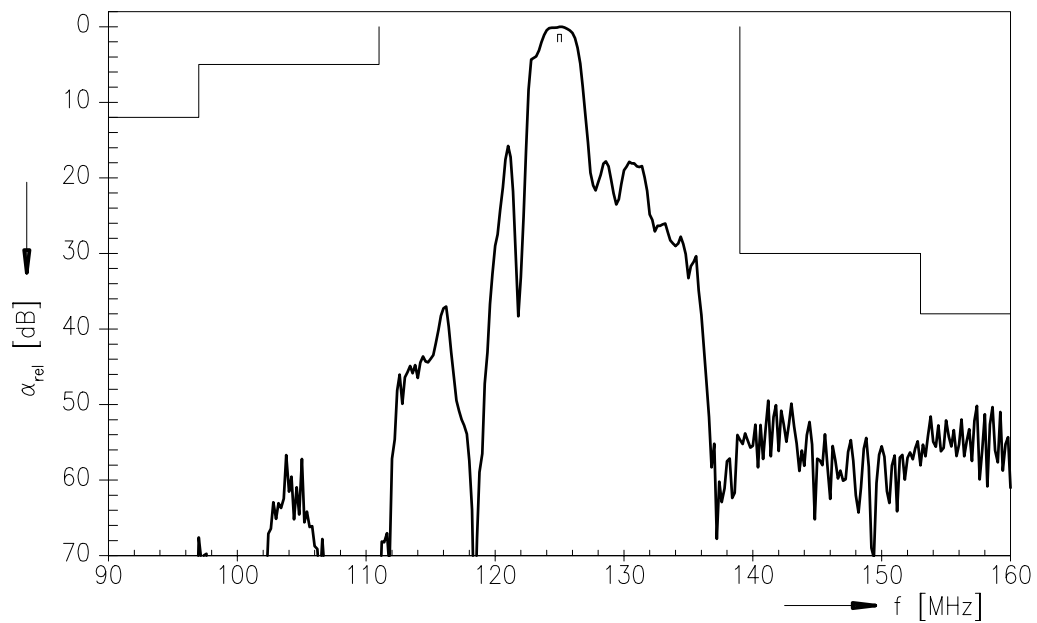
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Low-Loss Filter

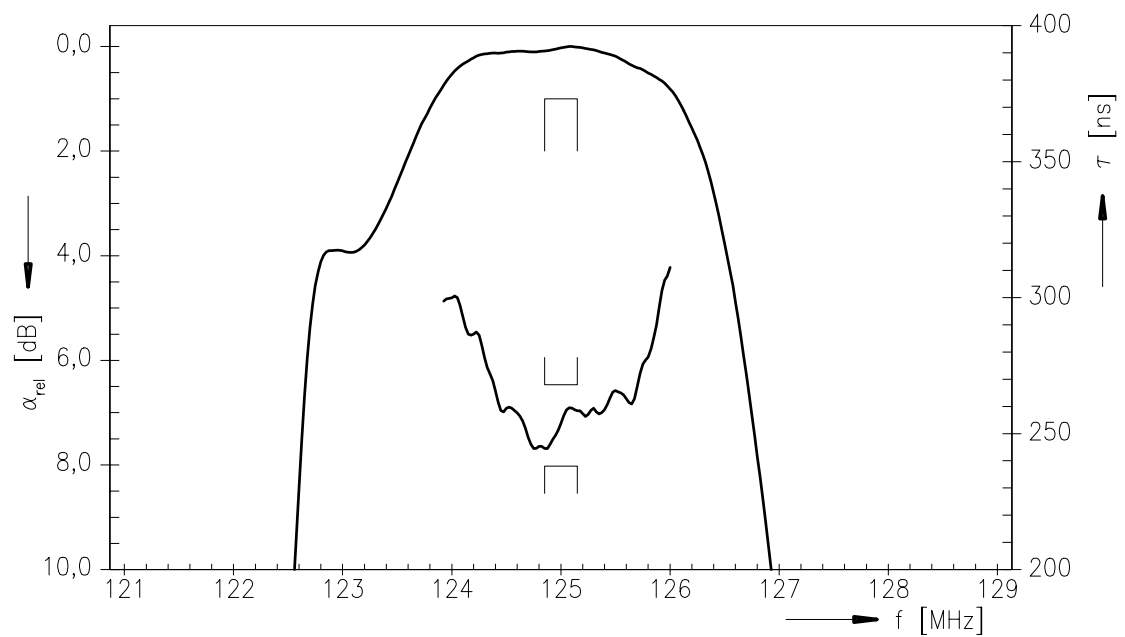
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Transfer function



Transfer function (pass band)





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Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC IS PD
P.O. Box 80 17 09, D-81617 München

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