



SAW Components

Data Sheet B3647





SAW Components

B3647

Low-Loss Filter

125,0 MHz

Data Sheet

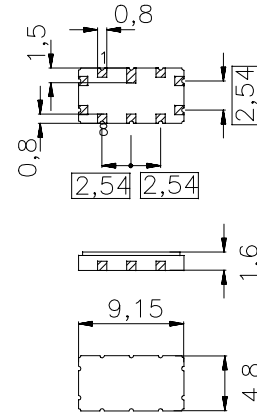
Ceramic package **QCC10B**

Features

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

Terminals

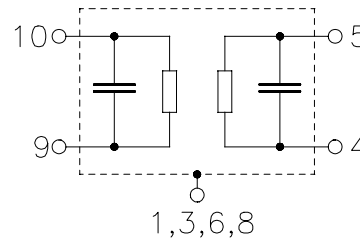
- Gold-plated



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	°C
Storage temperature range	T_{stg}	- 40/+ 125	°C
DC voltage	V_{DC}	0	V
Source power	P_s	10	dBm


SAW Components
B3647
Low-Loss Filter
125,0 MHz
Data Sheet
Characteristics

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

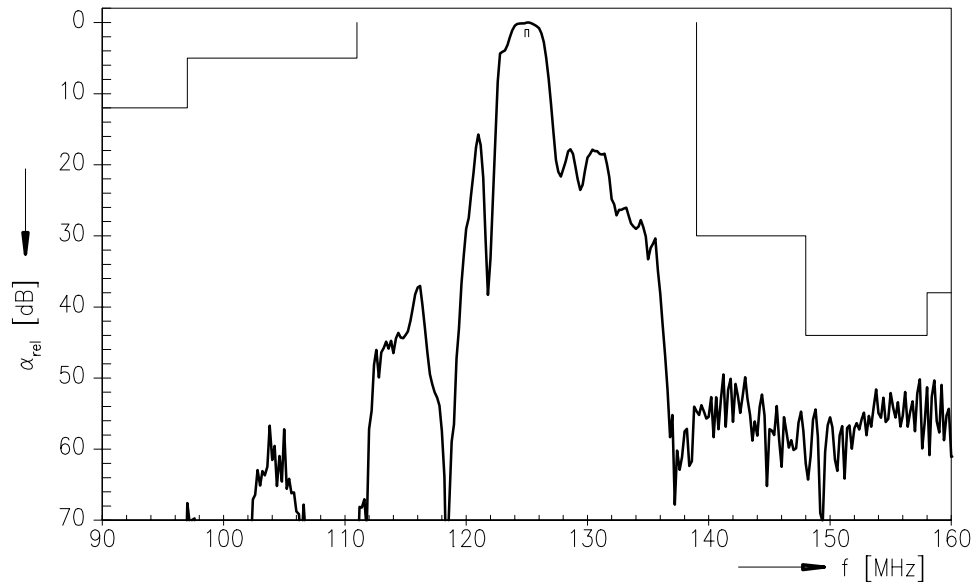
			min.	typ.	max.	
Nominal frequency	f_N		—	125,0	—	MHz
Insertion attenuation	$f_N \pm 150 \text{ kHz}$	α_{\max}	1,2	1,5	3,2	dB
Passband width	$\alpha_{\text{rel}} \leq 1,0 \text{ dB}$	$B_{1,0\text{dB}}$	—	2,2	—	MHz
Amplitude ripple (p-p)	$f_N \pm 150 \text{ kHz}$	$\Delta\alpha$	—	0,15	1,0	dB
Absolute group delay (at f_N)		τ	—	250	300	ns
Group delay ripple (p-p)	$f_N \pm 150 \text{ kHz}$	$\Delta\tau$	—	20	30	ns
Relative attenuation (relative to α_{\max})		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	—	—	dB
	$f_N + 0,15 \text{ MHz}$... $f_N + 14,0 \text{ MHz}$		0,0	—	—	dB
	$f_N + 14,0 \text{ MHz}$... $f_N + 23,0 \text{ MHz}$		30,0	50,0	—	dB
	$f_N + 23,0 \text{ MHz}$... $f_N + 33,0 \text{ MHz}$		44,0	48,0	—	dB
	$f_N + 33,0 \text{ MHz}$... $f_N + 325,0 \text{ MHz}$		38,0	46,0	—	dB
Input IP3 (Third order intercept point)¹⁾			45	—	—	dBm
VSWR	$f_N \pm 150 \text{ kHz}$		—	1,4:1	2,0:1	
Temperature coefficient of frequency		TC_f	—	-70	—	ppm/K

1) With two 10 dBm fundamental signals at 125 MHz and 139 MHz applied the third order intermodulation product at the output at 111 MHz will have less than -64 dBm.

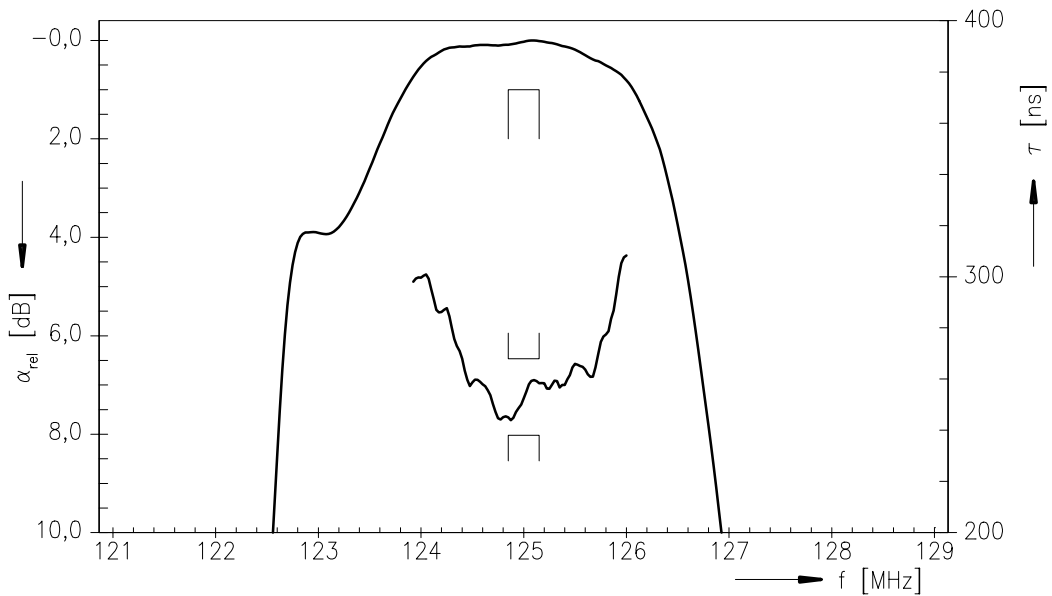


Data Sheet

Transfer function



Transfer function (pass band)





SAW Components

B3647

Low-Loss Filter

125,0 MHz

Data Sheet

Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC IS
P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2004. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.