EPCOS

SAW Components

Data Sheet B3647

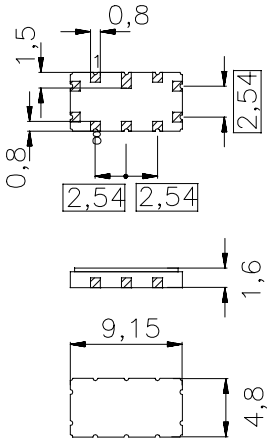
Ceramic package **QCC10B**

Features

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

Terminals

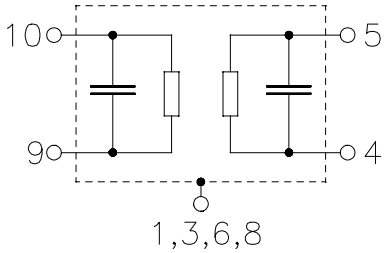
- Gold-plated



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 **S**ensitive **D**evice (**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	

Data Sheet

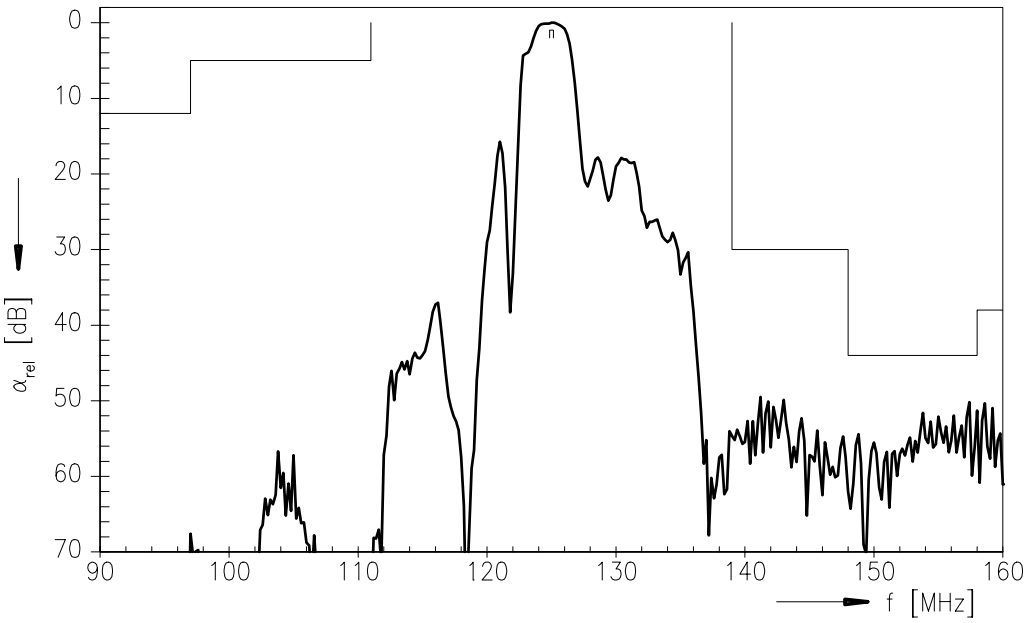
Characteristics

Operating temperature: T_A = -10 – +85 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

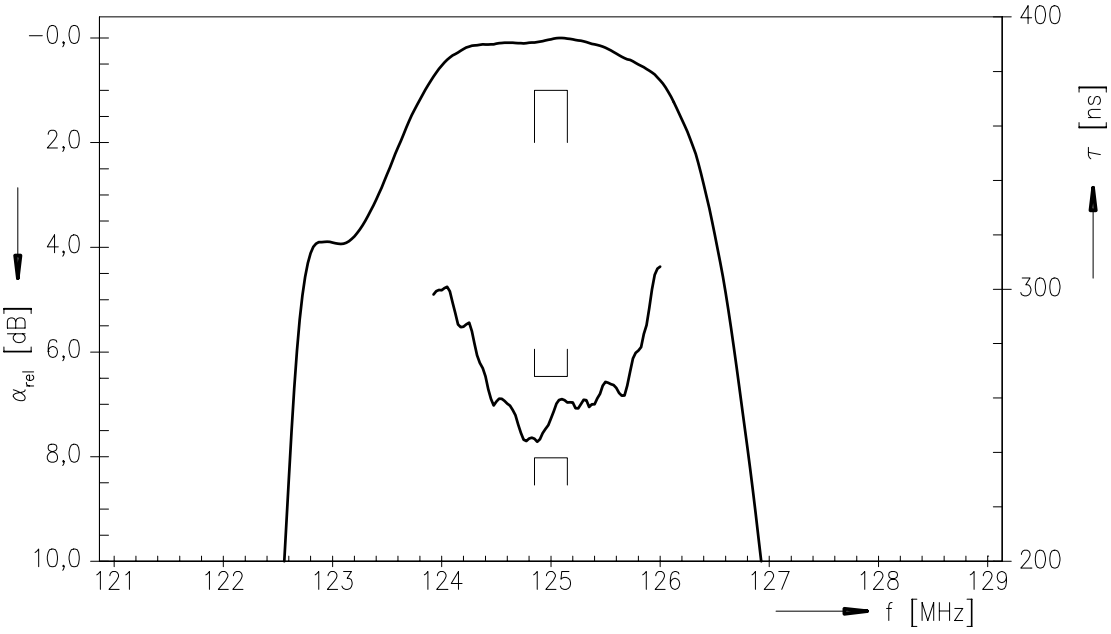
			min.	typ.	max.	
Nominal frequency		f_N	—	125,0	—	MHz
Insertion attenuation	$f_N \pm 150$ kHz	α_{max}	1,2	1,5	3,2	dB
Passband width		$B_{1,0dB}$				
	$\alpha_{rel} \leq 1,0$ dB		—	2,2	—	MHz
Amplitude ripple (p-p)		$\Delta\alpha$				
	$f_N \pm 150$ kHz		—	0,15	1,0	dB
Absolute group delay (at f_N)		τ	—	250	300	ns
Group delay ripple (p-p)		$\Delta\tau$				
	$f_N \pm 150$ kHz		—	20	30	ns
Relative attenuation (relative to α_{max})		α_{rel}				
10,0 MHz ... f_N - 28,0 MHz			12,0	70,0	—	dB
f_N - 28,0 MHz ... f_N - 14,0 MHz			5,0	50,0	—	dB
f_N - 14,0 MHz ... f_N - 0,15 MHz			0,0	—	—	dB
f_N + 0,15 MHz ... f_N + 14,0 MHz			0,0	—	—	dB
f_N + 14,0 MHz ... f_N + 23,0 MHz			30,0	50,0	—	dB
f_N + 23,0 MHz ... f_N + 33,0 MHz			44,0	48,0	—	dB
f_N + 33,0 MHz ... f_N + 325,0 MHz			38,0	46,0	—	dB
Input IP3 (Third order intercept point)[1)]			45	—	—	dBm
VSWR	$f_N \pm 150$ 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.

Transfer function



Transfer function (pass band)



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