EPCOS

SAW Components

Data Sheet B3646

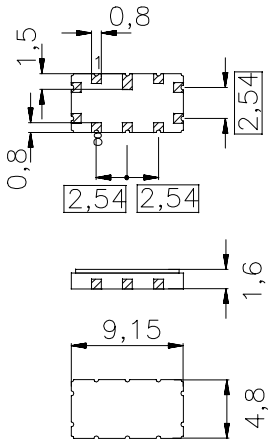
Ceramic package **QCC10B**

Features

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

Terminals

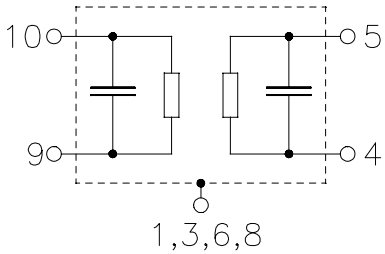
- Gold-plated



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
B3646	B39211-B3646-Z710	C61157-A7-A49	F61074-V8172-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

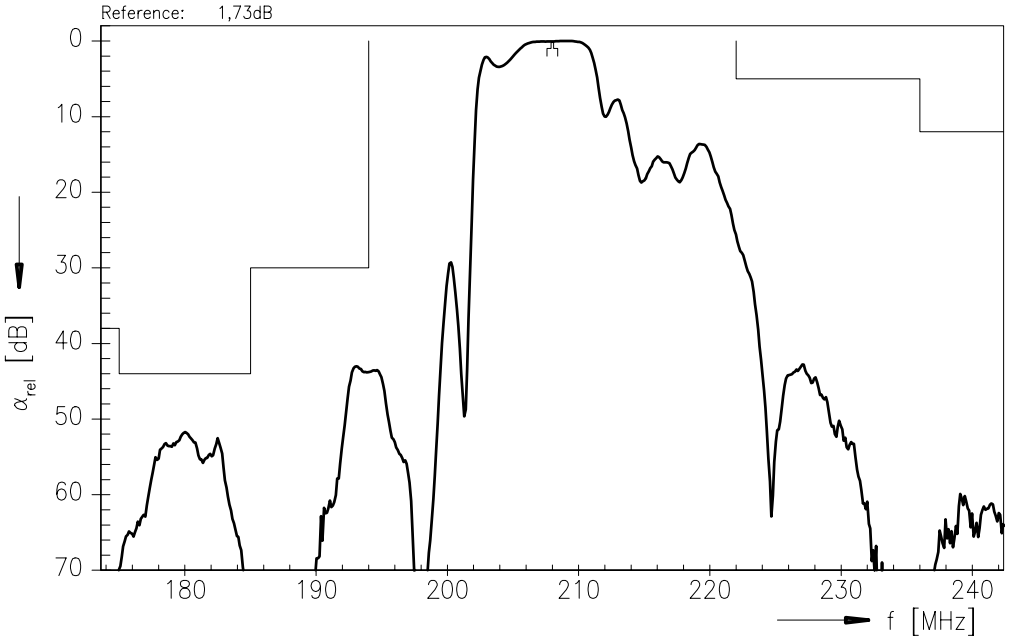
Characteristics

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

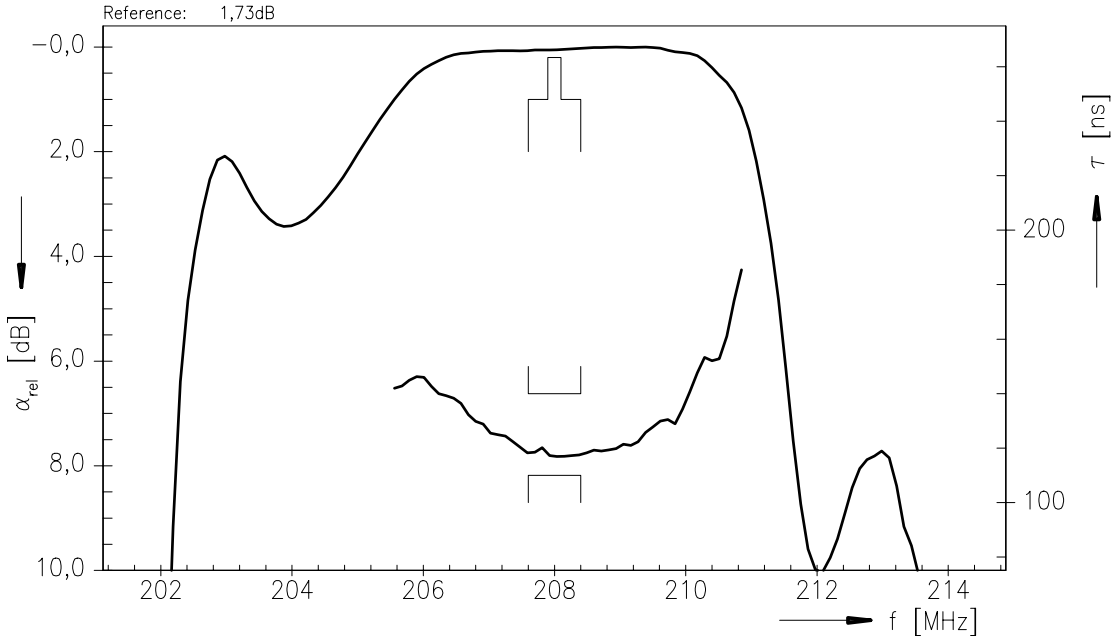
		min.	typ.	max.	
Nominal frequency	f_N	—	208,0	—	MHz
Maximum insertion attenuation f_N 400 kHz	α_{max}	1,5	2,0	3,5	dB
Passband width	$B_{1,0dB}$				
$\alpha_{rel} \leq$ 1,0 dB		—	5,08	—	MHz
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm$ 100 kHz		—	0,03	0,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm$ 400 kHz		—	0,1	1,0	dB
Absolute group delay (at f_N)	τ	—	120	300	ns
Group delay ripple (p-p)	$\Delta\tau$				
$f_N \pm$ 400 kHz		—	8	30	ns
Relative attenuation (relative to α_{max})	α_{rel}				
10,0 MHz ... f_N - 33,0 MHz		38,0	50,0	—	dB
f_N - 33,0 MHz ... f_N - 23,0 MHz		44,0	50,0	—	dB
f_N - 23,0 MHz ... f_N - 14,0 MHz		30,0	40,0	—	dB
f_N - 14,0 MHz ... f_N - 0,4 MHz		0,0	2,0	—	dB
f_N + 0,4 MHz ... f_N + 14,0 MHz		0,0	2,0	—	dB
f_N + 14,0 MHz ... f_N + 28,0 MHz		5,0	35,0	—	dB
f_N + 28,0 MHz ... 450,0 MHz		12,0	45,0	—	dB
Input IP3 (Third order intercept point)[1)]		45,0	—	—	dBm
VSWR $f_N \pm$ 400 kHz		—	1,5:1	2,0:1	
Temperature coefficient of frequency	TC_f	—	-70	—	ppm/K

1) With two 10 dbm fundamental signals at 180 MHz and 208 MHz applied the third order intermodulation product at the output at 236 MHz will have less than -64 dBm.

Transfer function



Transfer function (pass band)



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