EPCOS

SAW Components

Data Sheet B5025

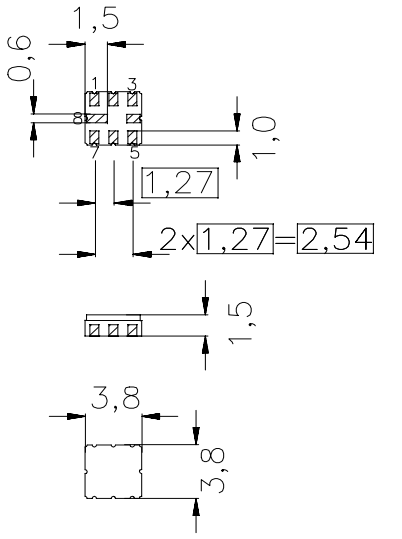
Ceramic package QCC8B

Features

- Low-loss IF filter
- Ceramic SMD package
- Balanced or unbalanced operation

Terminals

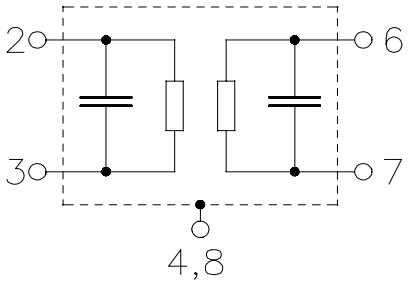
- Gold plated



typ. Dimensions in mm, approx. weight 0,1 g

Pin configuration

3	Input
2	Input or input ground
7	Output
6	Output or output ground
4, 8	Case ground
1, 5	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B5025	B39371-B5025-Z810	C61157-A7-A46	F61074-V8167-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	-40 / +85	˚C	
Storage temperature range	T_{stg}	-40 / +85	˚C	
DC voltage	V_{DC}	5	V	
ESD voltage	V^*_{ESD}	100*	V	Machine Model, 10 pulses
Source power	P_s	10	dBm	

*-acc. to JESD22-A115A(Machine Model), 10 negative & 10 positive pulses

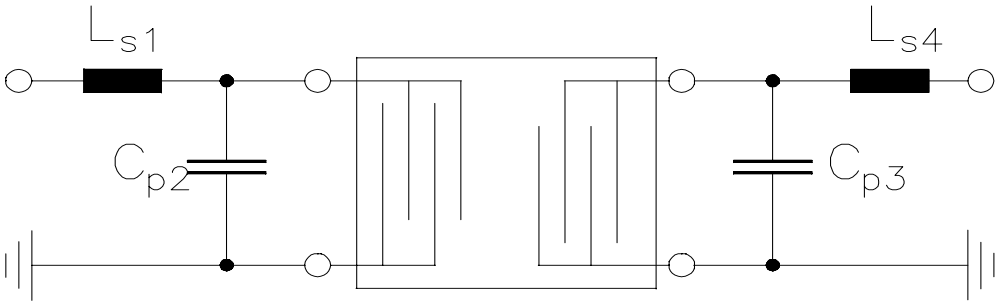
Characteristics

Operating temperature range: T = -10 ... 80 ˚C
Terminating source impedance: Z_S = 50 Ω unbalanced and matching network.
Terminating load impedance: Z_L = 50 Ω unbalanced and matching network.

		min.	typ.	max.	
Nominal frequency	f_N	—	374,0	—	MHz
Minimum insertion attenuation (including matching network)	α_{min}	—	4,1	6,0	dB
Bandwidth	B_{3dB}				
$\alpha_{rel} \leq 3$ dB		17	20,5	—	MHz
Amplitude ripple (peak-to-peak)	$\Delta\alpha$				
$f_N \pm 7$ MHz		—	1,0	1,5	dB
Group delay ripple (p-p)	$\Delta\tau$				
$f_N \pm 7$ MHz		—	45	100	ns
Relative attenuation (relative to α_{min})	α_{rel}				
f_N – 65,0 MHz ... f_N – 22,0 MHz		40	54	—	dB
f_N – 22,0 MHz ... f_N – 16,5 MHz		35	41	—	dB
f_N + 16,5 MHz ... f_N + 20,0 MHz		27	35	—	dB
f_N + 20,0 MHz ... f_N + 30,0 MHz		35	37	—	dB
f_N + 30,0 MHz ... f_N + 80,0 MHz		40	50	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

Matching network to 50 Ω

(Element values depend upon PCB layout)



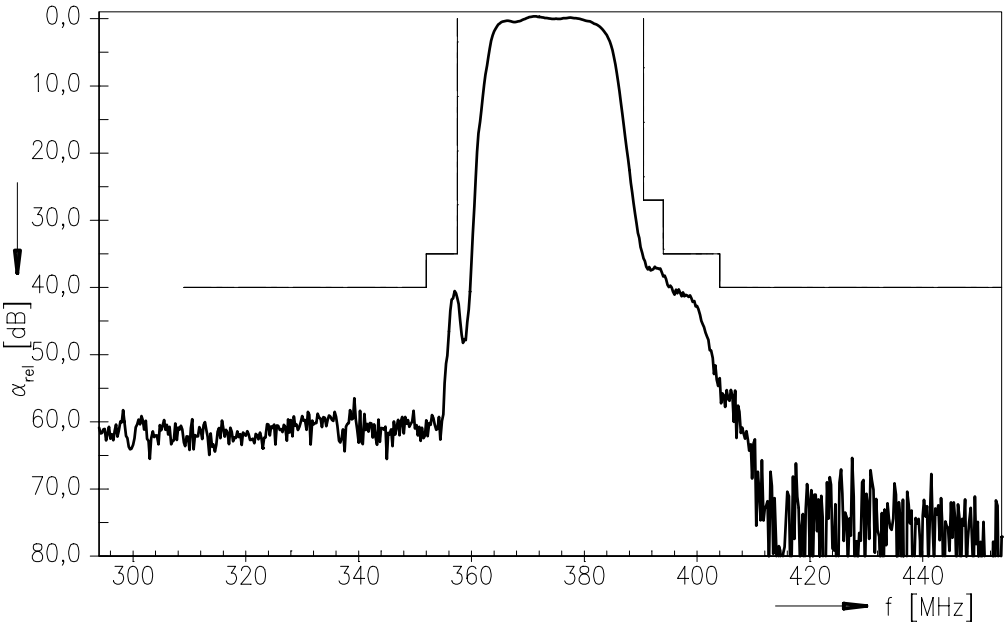
L_{s1} = 39nH

C_{p2} = 1,2pF

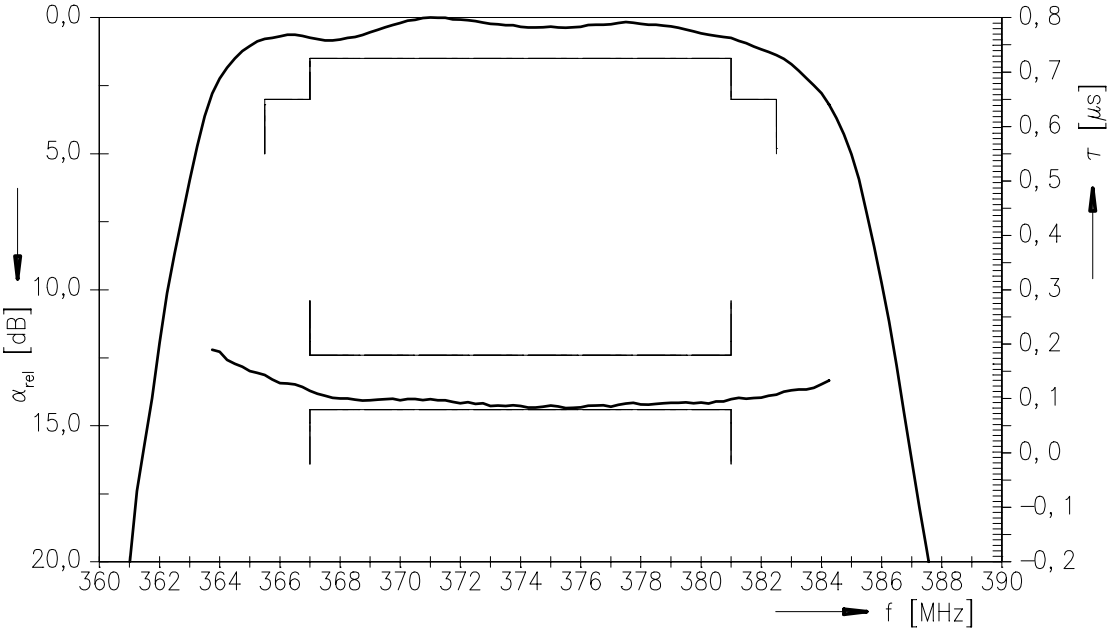
C_{p3} = 1,0pF

L_{s4} = 47nH

Transfer function:



Transfer function (pass band)**:**



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

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.