

# SAW Components

Data Sheet B3681





SAW Components B3681
Low-Loss Filter 422,5 MHz

**Data Sheet** 

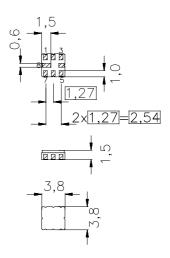
# Ceramic package QCC8B

#### **Features**

- Low-loss filter (RX) for Trunked Radio
- Usable bandwidth 5 MHz
- No matching required for operation at 50  $\Omega$
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

#### **Terminals**

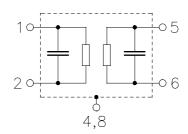
Gold-plated



typ. Dimensions in mm, approx. weight 0,07 g

#### Pin configuration

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



Туре	Ordering code	Marking and Package according to	Packing according to
B3681	B39421-B3681-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	$T_{A}$	-30 / +75	°C	
Storage temperature range	$T_{\rm stg}$	-40 / +85	°C	
DC voltage	$V_{\rm DC}$	0	V	
Source power	$P_{s}$	10	dBm	source impedance 50 $\Omega$



SAW Components B3681

**Low-Loss Filter** 422,5 MHz

**Data Sheet** 

Characteristics

Operating temperature range:

 $T_{A} = +15 \dots +35 \,^{\circ} \text{C}$   $Z_{S} = 50 \,\Omega$   $Z_{L} = 50 \,\Omega$ Terminating source impedance: Terminating load impedance:

		min.	typ.	max.	
Nominal frequency	f <sub>N</sub>	_	422,5	_	MHz
Maximum insertion attenuation	$\alpha_{\sf max}$				
420,0 MHz 425,0 MHz		_	3,0	3,5	dB
Amplitude ripple (p-p)	Δα				
420,0 MHz 425,0 MHz			0,7	1,2	dB
Return loss (Input and Output)					
420,0 MHz 425,0 MHz		12,0	14,0	_	dB
VSWR					
420,0 MHz 425,0 MHz		_	1,5:1	2,0:1	
Absolute attenuation	$\alpha_{abs}$				
0,3 MHz 335,0 MHz		40	60	_	dB
335,0 MHz 410,0 MHz		25	45	_	dB
410,0 MHz 415,0 MHz		25	35	_	dB
442,0 MHz 510,0 MHz		20	45	_	dB
510,0 MHz 1105,0 MHz		40	45	_	dB
1105,0 MHz 1800,0 MHz		20	25	_	dB
Temperature coefficient of frequency	TC <sub>f</sub>		- 36	<u> </u>	ppm/K



SAW Components B3681

**Low-Loss Filter** 422,5 MHz

**Data Sheet** 

# Characteristics

Operating temperature range:

 $T_{A} = -30 \dots +75 \,^{\circ} \text{C}$   $Z_{S} = 50 \,\Omega$   $Z_{L} = 50 \,\Omega$ Terminating source impedance: Terminating load impedance:

		min.	typ.	max.	
Nominal frequency	f <sub>N</sub>	_	422,5	_	MHz
Maximum insertion attenuation	$\alpha_{\sf max}$				
420,0 MHz 425,0 MHz		_	3,0	3,5	dB
Amplitude ripple (p-p)	Δα				
420,0 MHz 425,0 MHz		_	0,8	2,0	dB
Return loss (Input and Output)					
420,0 MHz 425,0 MHz		12,0	14,0	_	dB
VSWR					
420,0 MHz 425,0 MHz		_	1,5:1	2,0:1	
Absolute attenuation	$\alpha_{abs}$				
0,3 MHz 335,0 MHz		40	60	_	dB
335,0 MHz 410,0 MHz		25	45	_	dB
410,0 MHz 415,0 MHz		25	35	_	dB
442,0 MHz 510,0 MHz		20	45	_	dB
510,0 MHz 1105,0 MHz		40	45	_	dB
1105,0 MHz 1800,0 MHz		20	25	_	dB
Temperature coefficient of frequency	TC <sub>f</sub>	_	- 36	_	ppm/K

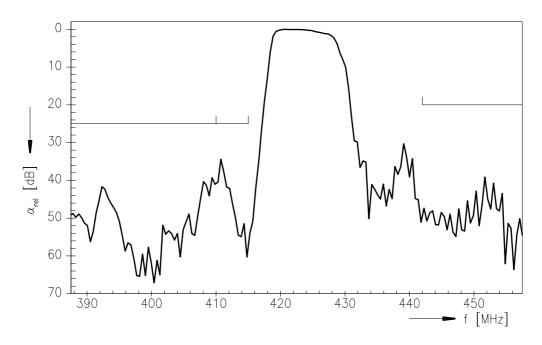


SAW Components B3681

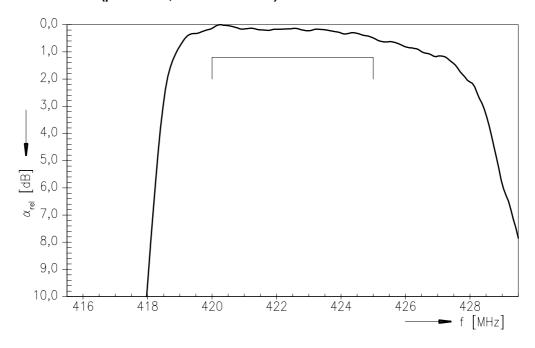
Low-Loss Filter 422,5 MHz

**Data Sheet** 

#### **Transfer function**



# Transfer function (pass band; +15 °C ... +35 °C)





SAW Components B3681

Low-Loss Filter 422,5 MHz

**Data Sheet** 

# Published by EPCOS AG Surface Acoustic Wave Components Division, OFW E NK P.O. Box 80 17 09, D-81617 München

© EPCOS AG 1999. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

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.