



# SAW Components

Data Sheet B3823





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B3823

Low-Loss Filter

397,5 MHz

Data Sheet

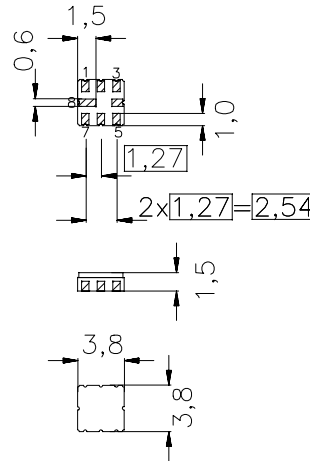
Ceramic package QCC8B

**Features**

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

**Terminals**

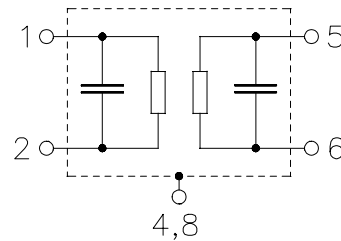
- Gold-plated



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



Type	Ordering code	Marking and Package according to	Packing according to
B3823	B39401-B3823-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T_A$	-30 / +70	°C	
Storage temperature range	$T_{stg}$	-40 / +85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	10	dBm	source impedance 50 Ω



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**Characteristics**

Operating temperature range:  $T_A = +15 \dots +35 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Nominal frequency</b>	$f_N$	—	397,5	—	MHz
<b>Maximum insertion attenuation</b> 395,0 MHz ... 400,0 MHz	$\alpha_{\max}$	—	2,7	3,5	dB
<b>Amplitude ripple (p-p)</b> 395,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,6	1,4	dB
<b>Return loss (Input and Output)</b> 395,0 MHz ... 400,0 MHz		12,0	13,0	—	dB
<b>VSWR</b> 395,0 MHz ... 400,0 MHz		—	1,6:1	2,0:1	
<b>Absolute attenuation</b>	$\alpha_{\text{abs}}$				
0,1 MHz ... 355,0 MHz		40	60	—	dB
355,0 MHz ... 390,0 MHz		25	35	—	dB
435,0 MHz ... 885,0 MHz		40	50	—	dB
885,0 MHz ... 2000,0 MHz		20	35	—	dB
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-36	—	ppm/K



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**Characteristics**

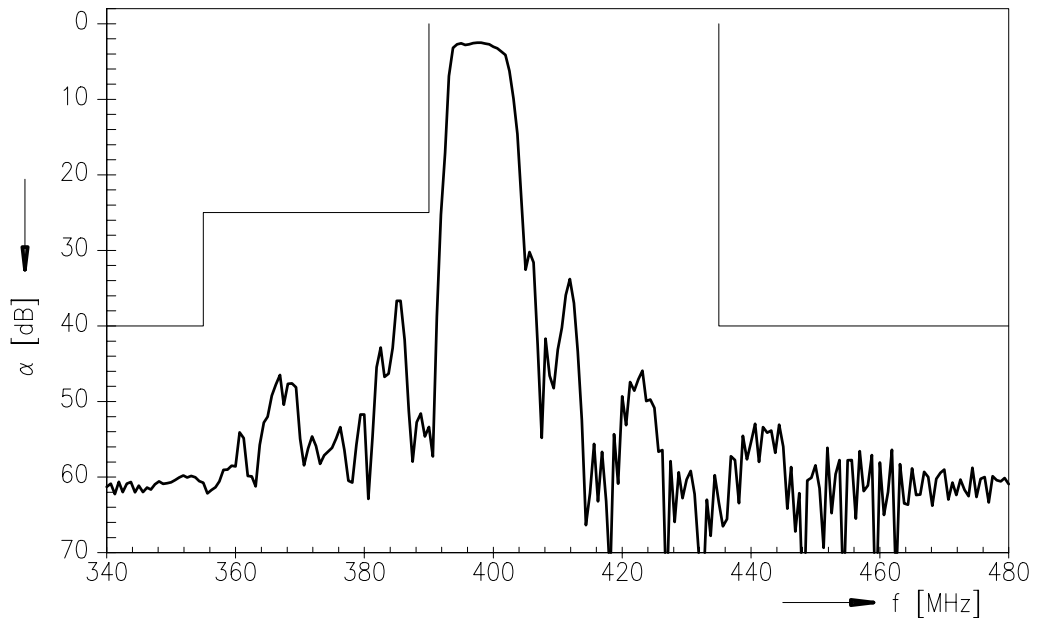
Operating temperature range:  $T_A = -30 \dots +70 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	397,5	—	MHz
<b>Maximum insertion attenuation</b> 395,0 MHz ... 400,0 MHz	$\alpha_{\max}$	—	3,0	3,5	dB
<b>Amplitude ripple (p-p)</b> 395,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,8	2,0	dB
<b>Return loss (Input and Output)</b> 395,0 MHz ... 400,0 MHz		12,0	13,0	—	dB
<b>VSWR</b> 395,0 MHz ... 400,0 MHz		—	1,6:1	2,0:1	
<b>Absolute attenuation</b>	$\alpha_{\text{abs}}$				
0,1 MHz ... 355,0 MHz		40	60	—	dB
355,0 MHz ... 390,0 MHz		25	35	—	dB
435,0 MHz ... 885,0 MHz		40	50	—	dB
885,0 MHz ... 2000,0 MHz		20	35	—	dB
<b>Temperature coefficient of frequency</b>	$TC_f$	—	- 36	—	ppm/K

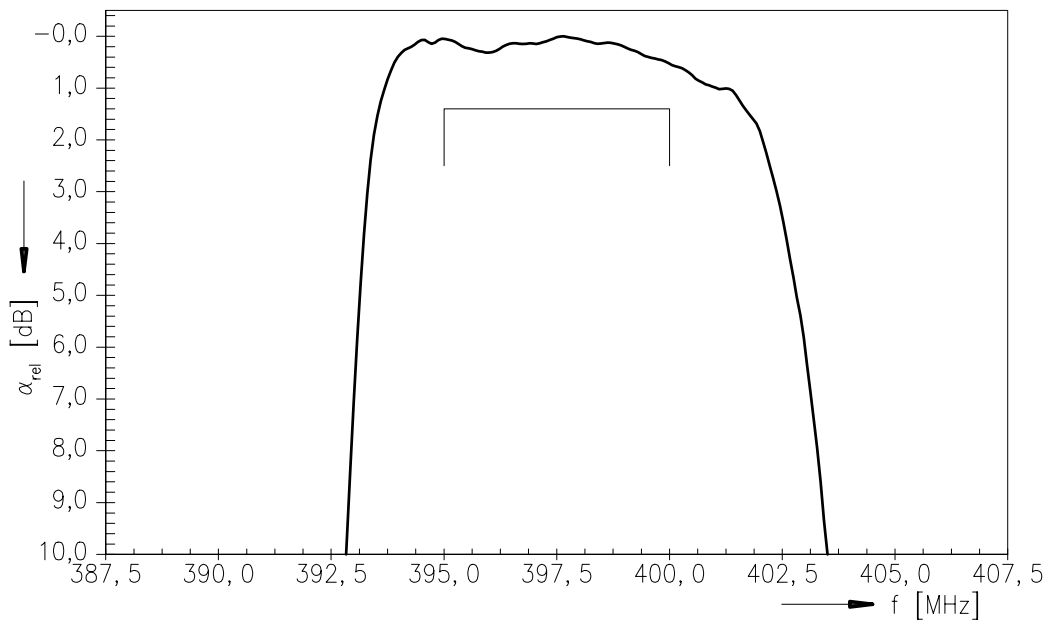


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Transfer function



Normalized transfer function (pass band; +15 °C ... +35 °C)





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**Published by EPCOS AG**

**Surface Acoustic Wave Components Division, SAW MC IS PD**

**P.O. Box 80 17 09, D-81617 München**

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