

SAW Components

Data Sheet B3823

Data Sheet

EPCOS



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B3823

Low-Loss Filter

397,5 MHz

Data Sheet

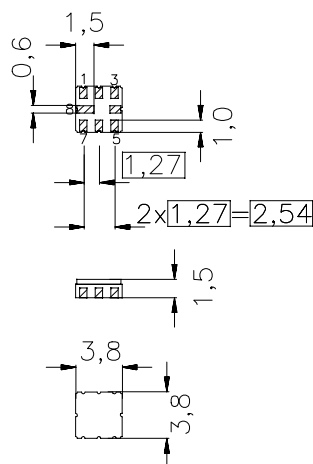
Ceramic package QCC8B

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

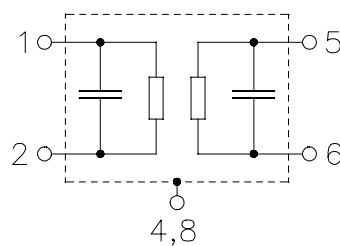
- Gold-plated



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	$^{\circ}\text{C}$	source impedance 50 Ω
Storage temperature range	T_{stg}	-40 / +85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	



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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:	$Z_L = 50 \text{ }\Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	397,5	—	MHz
Maximum insertion attenuation 395,0 MHz ... 400,0 MHz	α_{\max}	—	2,7	3,5	dB
Amplitude ripple (p-p) 395,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,6	1,4	dB
Return loss (Input and Output) 395,0 MHz ... 400,0 MHz		12,0	13,0	—	dB
VSWR 395,0 MHz ... 400,0 MHz		—	1,6:1	2,0:1	
Absolute attenuation 0,1 MHz ... 355,0 MHz	α_{abs}	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
Temperature coefficient of frequency	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.	
Nominal frequency	f_N	—	397,5	—	MHz
Maximum insertion attenuation 395,0 MHz ... 400,0 MHz	α_{\max}	—	3,0	3,5	dB
Amplitude ripple (p-p) 395,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,8	2,0	dB
Return loss (Input and Output) 395,0 MHz ... 400,0 MHz		12,0	13,0	—	dB
VSWR 395,0 MHz ... 400,0 MHz		—	1,6:1	2,0:1	
Absolute attenuation	α_{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
Temperature coefficient of frequency	TC_f	—	- 36	—	ppm/K



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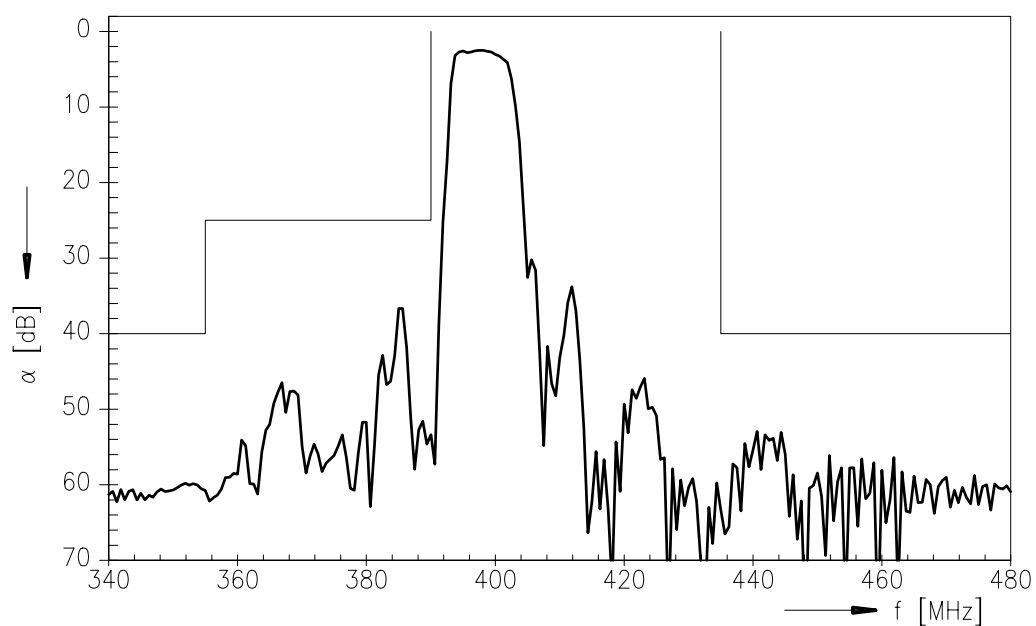
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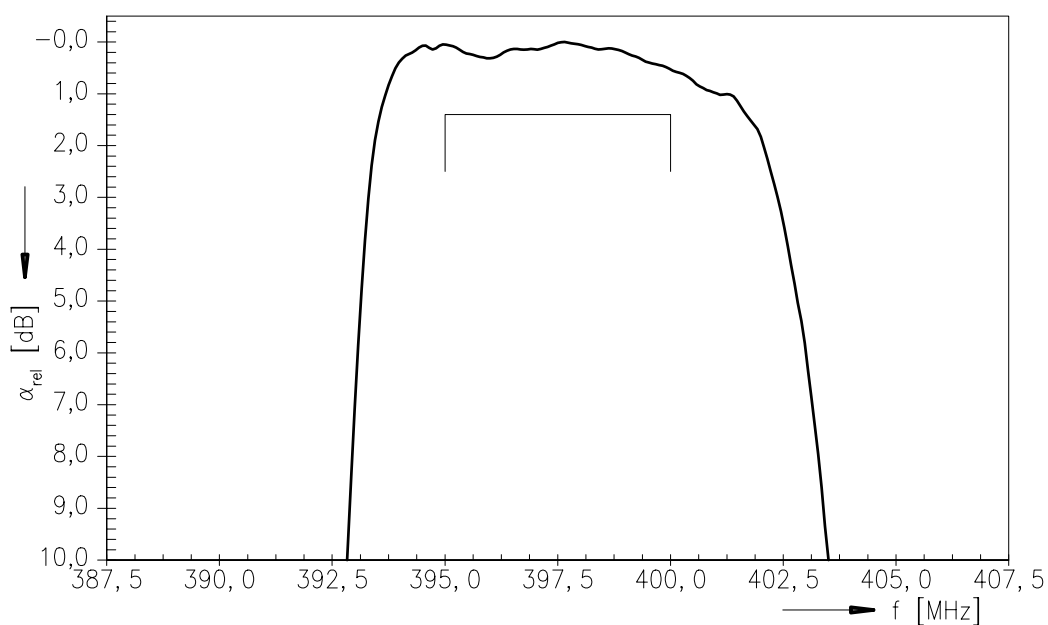
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Transfer function



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





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