



SAW Components

SAW RF low loss filter

DAB

Series/type:	B1608
Ordering code:	B39152-B1608-Z810
Date:	February 19, 2010
Version:	2.3



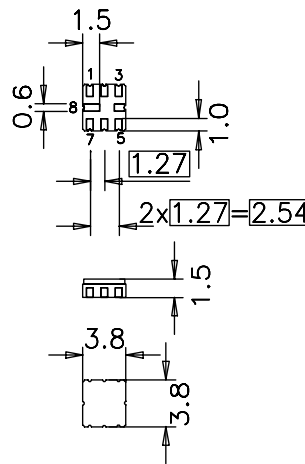
Application

- Low-loss RF filter for DAB
- Unbalanced or balanced operation
- Usable passband 40.0 MHz



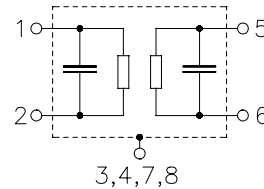
Features

- Package size 3.8 x 3.8 x 1.4 mm³
- Maximum height of 1.475 mm
- Package code QCC8B
- RoHS compatible
- Approximate weight 0.07 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- AEC-Q200 qualified component family
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

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





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1472.0 MHz

Data Sheet



Characteristics

Operating temperature range: $T = -40\text{ °C} \dots +85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

				min.	typ.	max.	
Center frequency			f_c	—	1472.0	—	MHz
Maximum insertion attenuation	1452.00	...1492.00	MHz	α_{max}	—	3.8	4.8
							dB
Amplitude ripple in passband (p-p)	1452.00	...1492.00	MHz	$\Delta\alpha$	—	1.0	1.5
							dB
Attenuation				α			
	500.00	...1262.00	MHz		34.0	38.0	—
	1262.00	...1382.00	MHz		34.0	38.0	—
	1382.00	...1398.00	MHz		25.0	30.0	—
	1398.00	...1414.00	MHz		18.0	22.0	—
	1547.00	...1580.00	MHz		25.0	35.0	—
	1580.00	...2200.00	MHz		33.0	40.0	—
							dB
Group delay ripple (p-p)				$\Delta\tau$			
Aperture 1 MHz	1452.00	...1492.00	MHz		—	10	—
							ns



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Characteristics

Operating temperature range: $T = -40\text{ °C} \dots +105\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	1472.0	—	MHz
Maximum insertion attenuation	α_{max}	—	3.8	4.8	dB
1452.00 ...1492.00 MHz					
Amplitude ripple in passband (p-p)	$\Delta\alpha$	—	1.0	1.6	dB
1452.00 ...1492.00 MHz					
Attenuation	α				dB
500.00 ...1262.00 MHz		34.0	38.0	—	
1262.00 ...1382.00 MHz		34.0	38.0	—	
1382.00 ...1398.00 MHz		25.0	30.0	—	
1398.00 ...1414.00 MHz		18.0	22.0	—	
1547.00 ...1580.00 MHz		25.0	35.0	—	
1580.00 ...2200.00 MHz		33.0	40.0	—	
Group delay ripple (p-p)	$\Delta\tau$				ns
Aperture 1 MHz	1452.00 ...1492.00 MHz	—	10	—	



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Characteristics

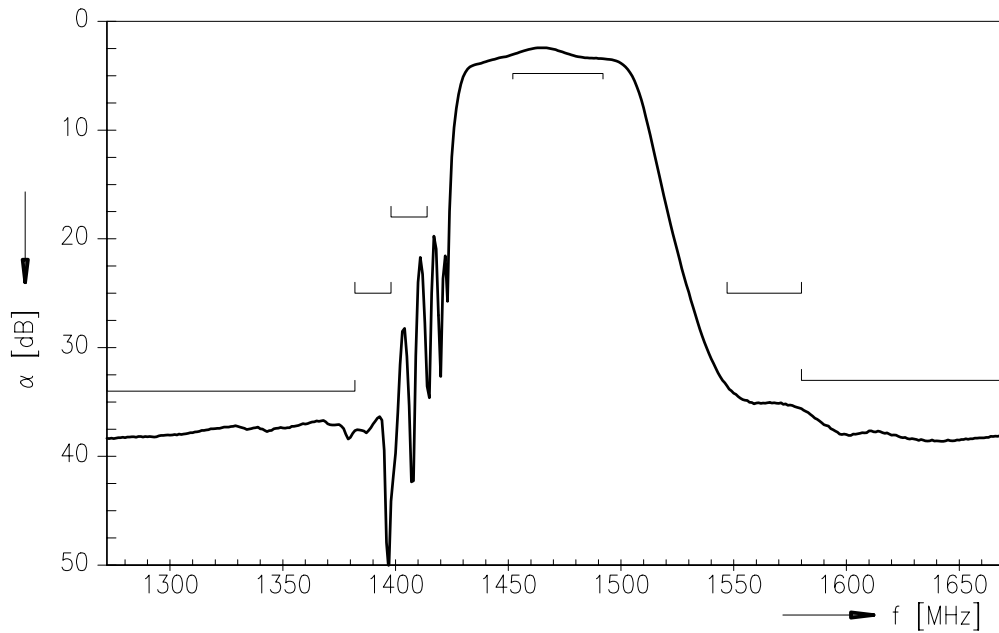
Maximum ratings

Operable temperature range	T	-40 / +105	°C	
Storage temperature range	T _{stg}	-40 / +105	°C	
DC voltage	V _{DC}	0	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power at 1452.00... 1492.00 MHz	P _{IN}	0	dBm	source impedance 50 Ω

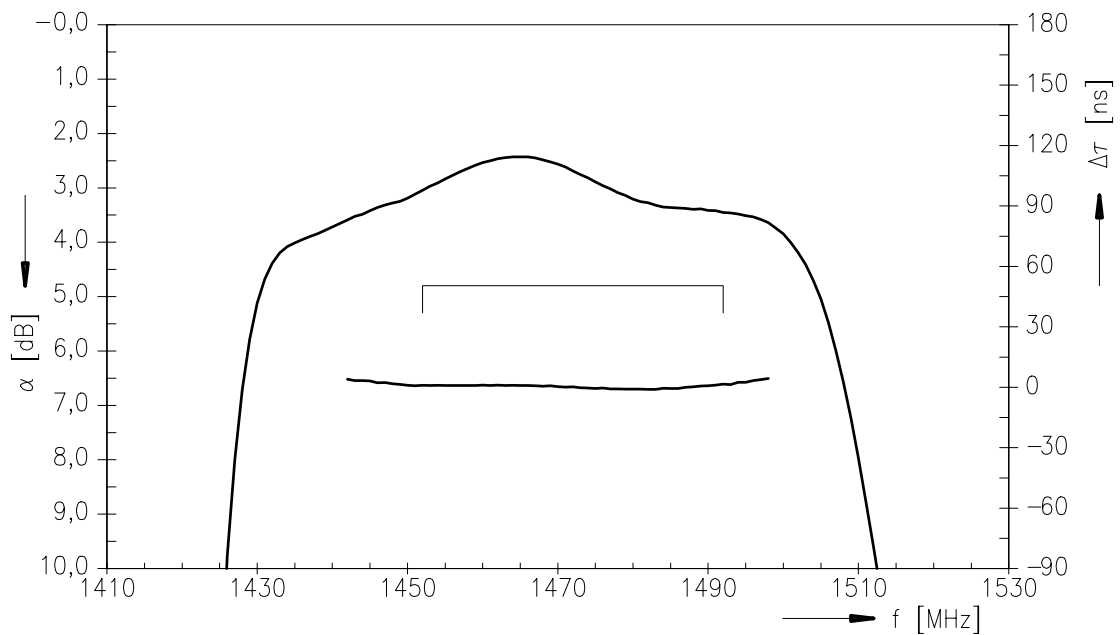
¹⁾ acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulses.



Transfer function S_{21} without matching network



Transfer function S_{21} (passband) without matching network





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B1608

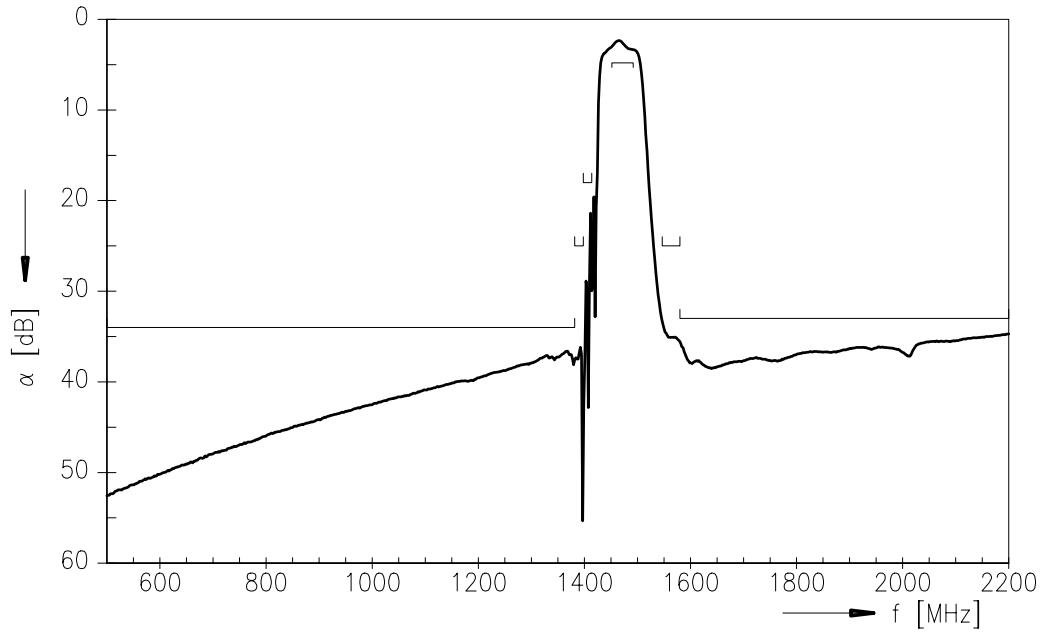
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1472.0 MHz

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Transfer function S_{21} (wideband)





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1472.0 MHz

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References

Type	B1608
Ordering code	B39152-B1608-Z810
Marking and package	C61157-A7-A46
Packaging	F61074-V8167-Z000
Date codes	L_1126
S-parameters	B1608_NB.s4p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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