



SAW Components

SAW RF low loss filter

DAB

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

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1472.0 MHz

Data Sheet



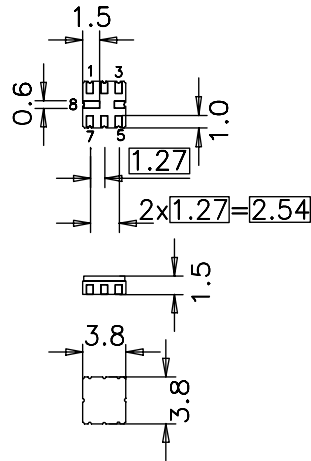
Application

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



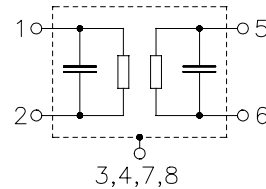
Features

- 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



Please read *cautions and warnings and important notes* at the end of this document.



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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	—	dB
	1262.00 ...1382.00 MHz			34.0	38.0	—	dB
	1382.00 ...1398.00 MHz			25.0	30.0	—	dB
	1398.00 ...1414.00 MHz			18.0	22.0	—	dB
	1547.00 ...1580.00 MHz			25.0	35.0	—	dB
	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}	1452.00 ...1492.00 MHz		—	3.8	4.8	dB
Amplitude ripple in passband (p-p)	$\Delta\alpha$	1452.00 ...1492.00 MHz		—	1.0	1.6	dB
Attenuation	α						
		500.00 ...1262.00 MHz		34.0	38.0	—	dB
		1262.00 ...1382.00 MHz		34.0	38.0	—	dB
		1382.00 ...1398.00 MHz		25.0	30.0	—	dB
		1398.00 ...1414.00 MHz		18.0	22.0	—	dB
		1547.00 ...1580.00 MHz		25.0	35.0	—	dB
		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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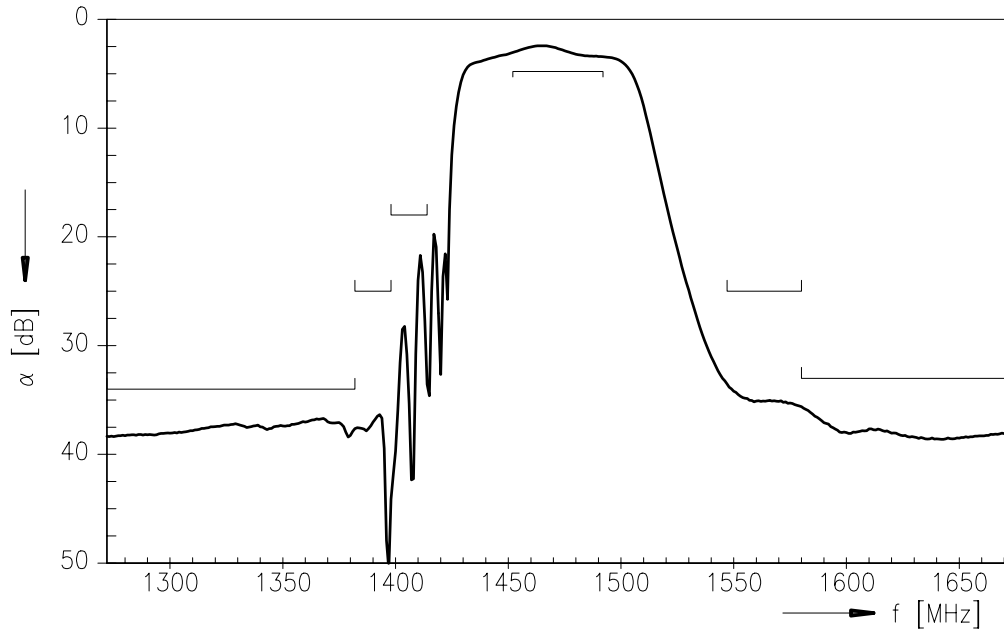
Characteristics

Maximum ratings

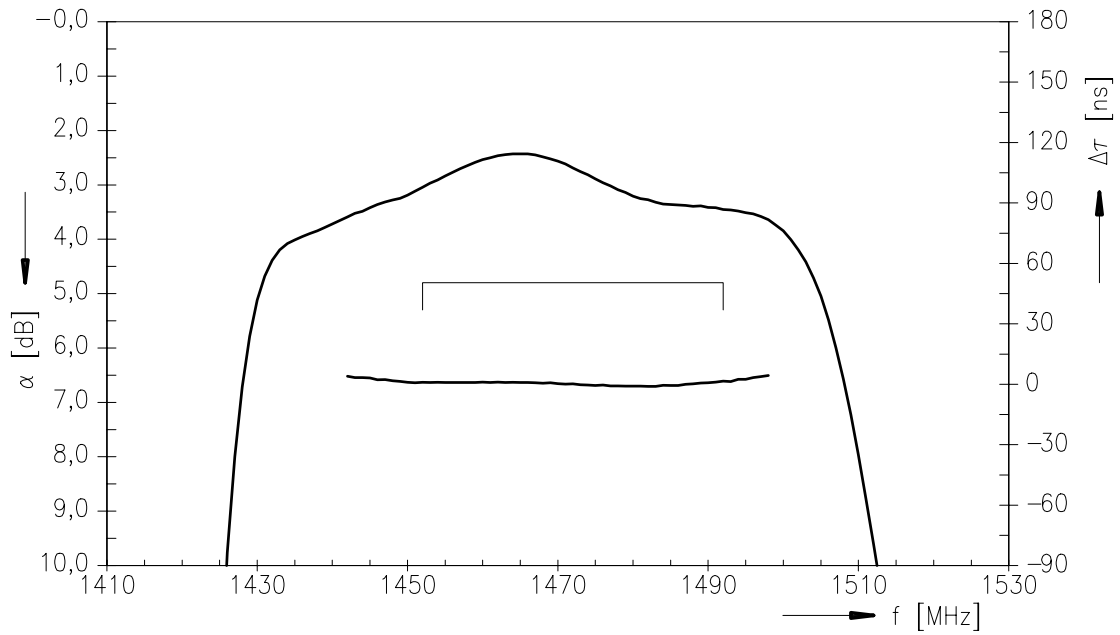
Operable temperature range	T	-40 / +105	°C	
Storage temperature range	T _{stg}	-40 / +105	°C	
DC voltage	V _{DC}	0	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power at 1452.00... 1492.00 MHz	P _{IN}	0	dBm	source impedance 50 Ω

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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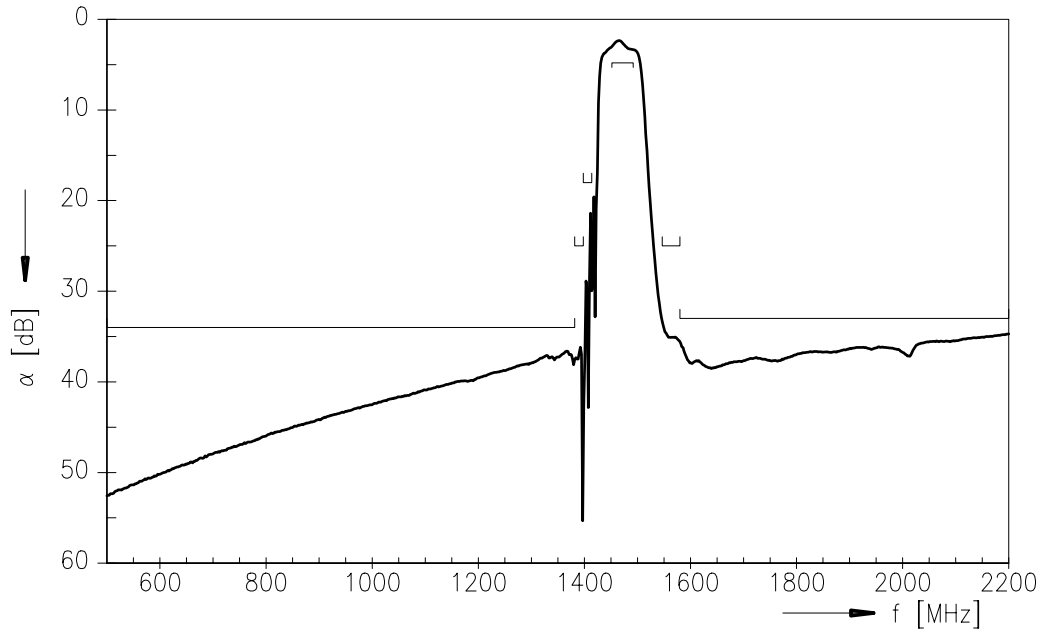
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Transfer function S_{21} (wideband)



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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."

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