SAW Components

SAW filter

Double conversion

Series/type:	**B1645**
Ordering code:	**B39132-B1645-B510**
Date:	August 27, 2008
Version:	2.0

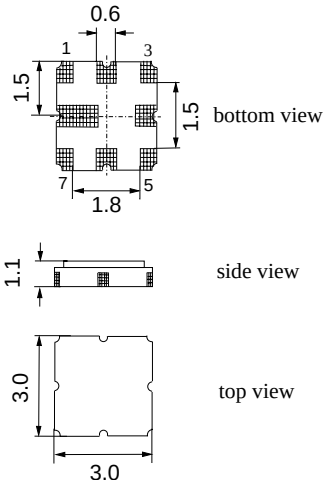
Data sheet SMD

Application

- Low–loss RF filter for dual conversion
- Usable passband at 8.0 MHz
- No matching network required for operation at 100 Ω
- Balanced to balanced operation
- Low group delay ripple

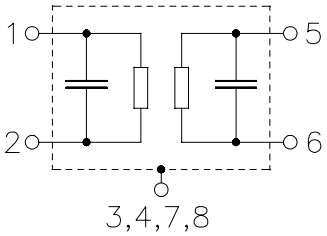
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Maximum height of 1.225 mm
- Package code QCC8F
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration

- 1 Input
- 2 Input
- 5 Output
- 6 Output
- 3,7 To be grounded
- 4,8 Case - ground



Data sheet SMD

Characteristics

Operating temperature range: T = –40 ˚C to +85 ˚C
Terminating source impedance: Z_S = 100 Ω (balanced)
Terminating load impedance: Z_L = 100 Ω (balanced)

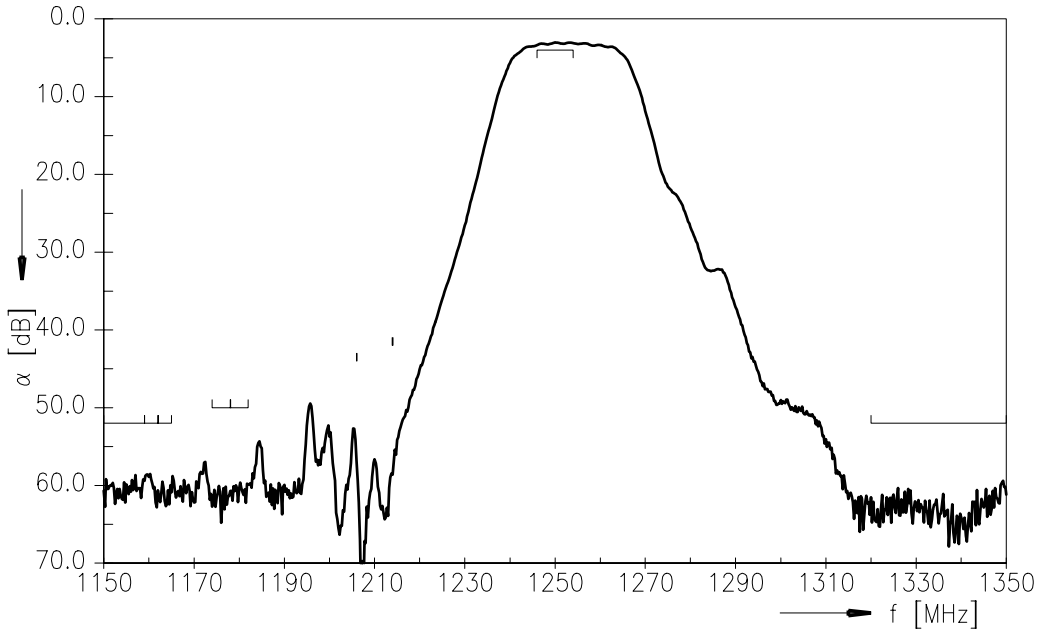
		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	1250.00	—	MHz
Maximum insertion attenuation	α_{max}				
1246.00 ... 1254.00 MHz		—	3.8	4.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1246.00 ... 1254.00 MHz		—	1.0	1.5	dB
Attenuation	α				
500.00 ... f_N -91.00 MHz		52.00	58.00	—	dB
f_N -91.00 ... f_N -85.00 MHz		52.00	58.00	—	dB
f_N -76.00 ... f_N -68.00 MHz		50.00	56.00	—	dB
f_N -88.00 MHz		52.00	58.00	—	dB
f_N -72.00 MHz		50.00	56.00	—	dB
f_N -44.00 MHz		44.00	50.00	—	dB
f_N -36.00 MHz		42.00	50.00	—	dB
f_N +70.00 ... 2000.00 MHz		52.00	58.00	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
1246.00 ... 1254.00 MHz		—	15.00	—	ns

Maximum ratings

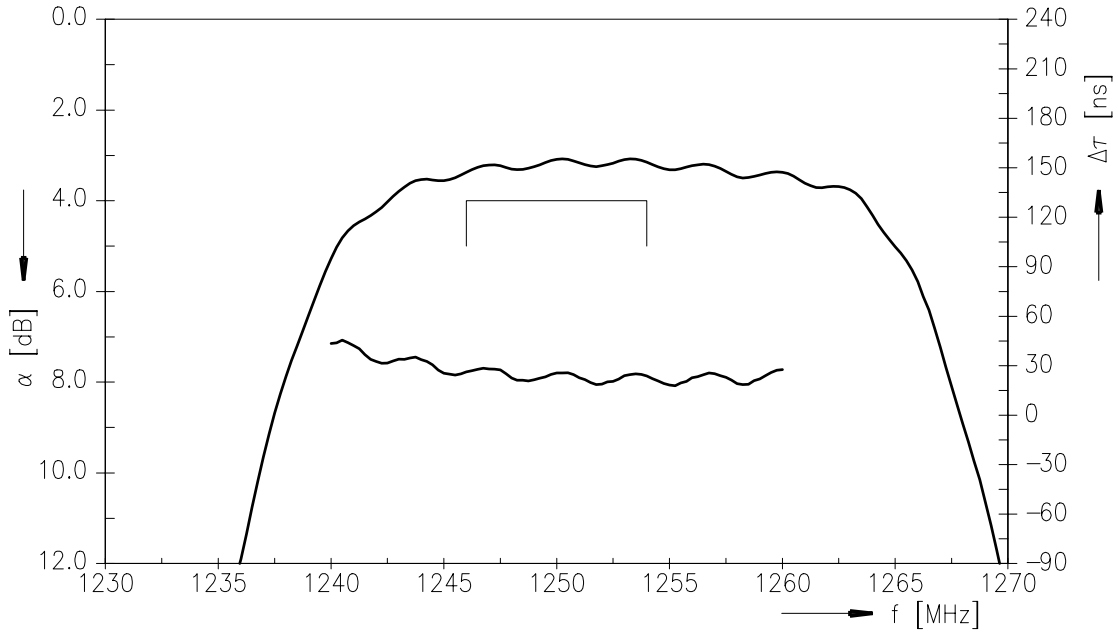
Operable temperature range	T	–40/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
ESD voltage	V_{ESD}	50[1)]	V	machine model, 1 pulse
DC voltage	V_{DC}	0	V	
Source power	P_S	0	dBm	source impedance 100 Ω

1) according to JESD22-A115A (machine model), 1 negative & 1 positive pulse.

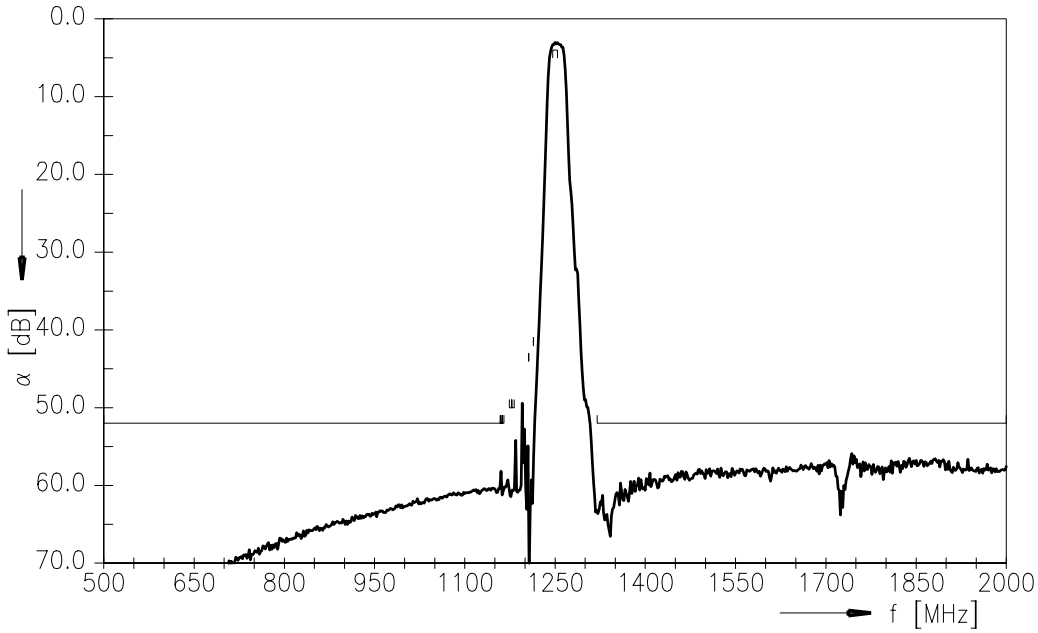
Transfer function



Transfer function (passband)



Transfer function (wide band)



References

Type	B1645
Ordering code	B39132-B1645-B510
Marking and package	C61157-A7-A72
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B1645_NB.s4p B1645_WB.s4p See file header for port/pin assignment table.
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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