SAW Components

SAW RF filter

Automotive telematics

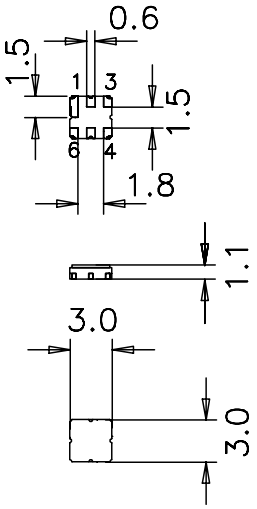
Series/type:	**B3908**
Ordering code:	**B39881B3908U410**
Date:	April 20, 2010
Version:	2.0

Application

- Low-loss RF filter for Automotive telematics
- Low amplitude ripple
- Usable passband 25 MHz

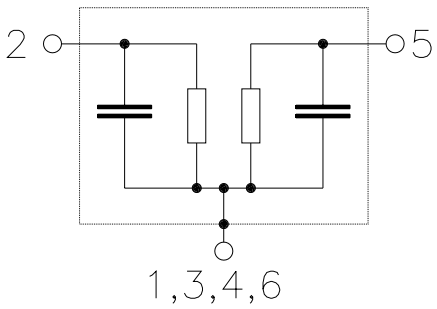
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)



Pin configuration

- 2 Input
- 5 Output
- 1,3,4,6 Case ground (to be grounded)



Data sheet SMD

Characteristics

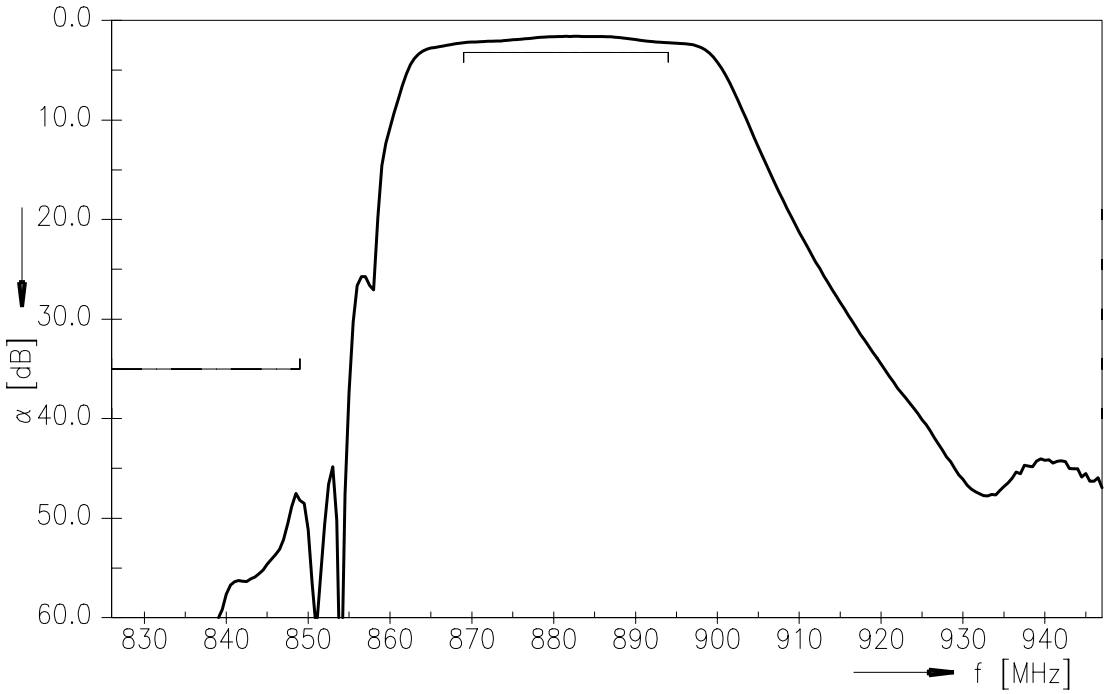
Temperature range for specification: T = –40 ˚C to +95 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	881.50	—	MHz
Maximum insertion attenuation	α_{max}				
869.0 ... 894.0 MHz		—	2.6	3.2	dB
Amplitude ripple (p-p)	Δα				
869.0 ... 894.0 MHz		—	1.1	1.7	dB
VSWR					
869.0 ... 894.0 MHz		—	1.7	2.0	
Attenuation	α				
10.0 ... 820.0 MHz		40	50	—	dB
820.0 ... 849.0 MHz		35	45	—	dB
970.0 ... 997.0 MHz		35	60	—	dB
997.0 ... 1150.0 MHz		40	60	—	dB
1150.0 ... 1500.0 MHz		35	50	—	dB
1500.0 ... 2000.0 MHz		30	40	—	dB
2000.0 ... 3000.0 MHz		20	25	—	dB

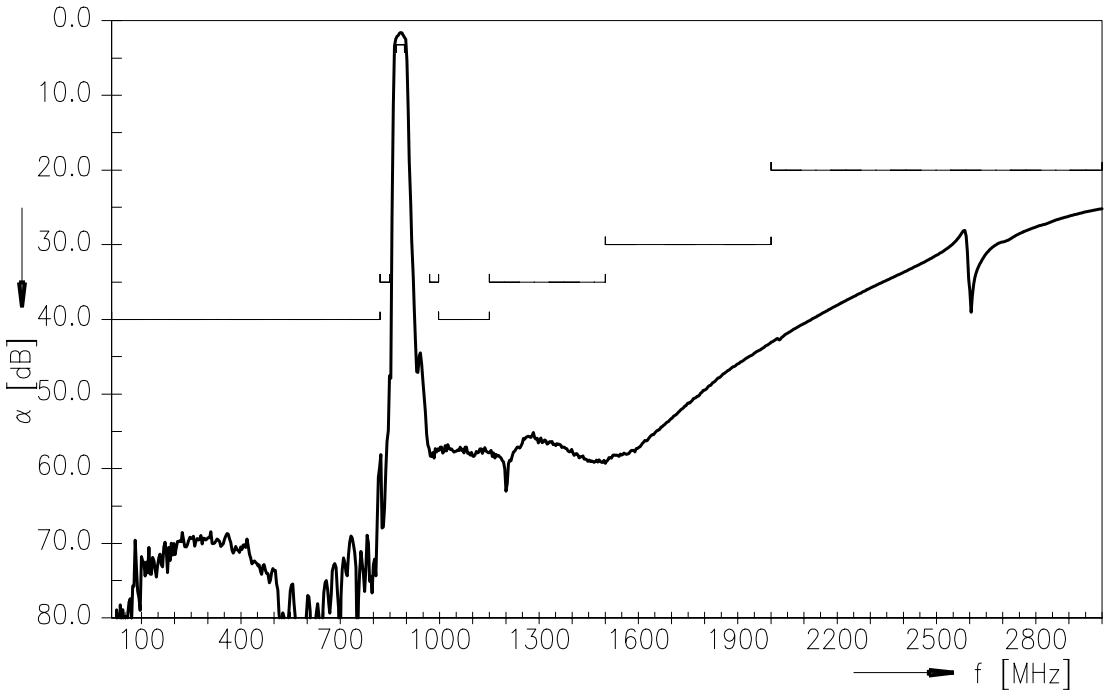
Maximum ratings

Operable temperature range	T	–45/+125	˚C	
Storage temperature range	T_{stg}	–45/+125	˚C	
DC voltage	V_{DC}	6	V	
Input power	P_{IN}	18	dBm	

Frequency response



Frequency response (wideband)



References

Type	B3908
Ordering code	B39881B3908U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B3908_NB.s2p B3908_WB.s2p 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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