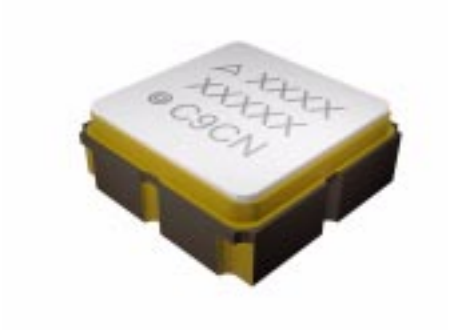
SAW Components

SAW RF filter for base stations

Series/type:	**B5113**
Ordering code:	**B39791B5113U410**
Date:	April 29, 2013
Version:	2.1

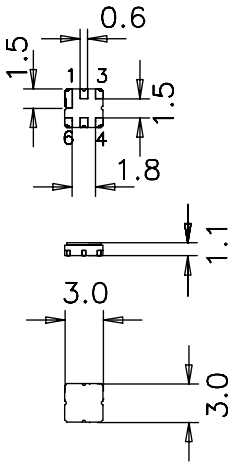
Application

- Low-loss RF filter for Basestation
- Usable band width 22 MHz
- 50 Ω single ended



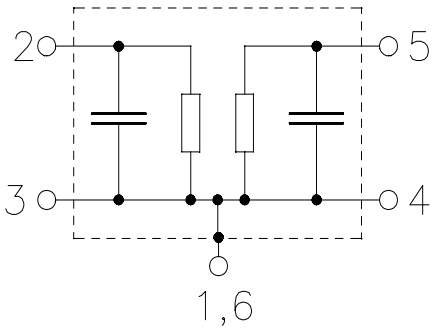
Features

- Package size 3.0 x3.0 x 1.10 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Ceramic package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)
- Filter surface passivated
- **M**oisture **S**ensitive **L**evel 1



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded



Data sheet

Characteristics

Temperature range for specification: T = –40 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

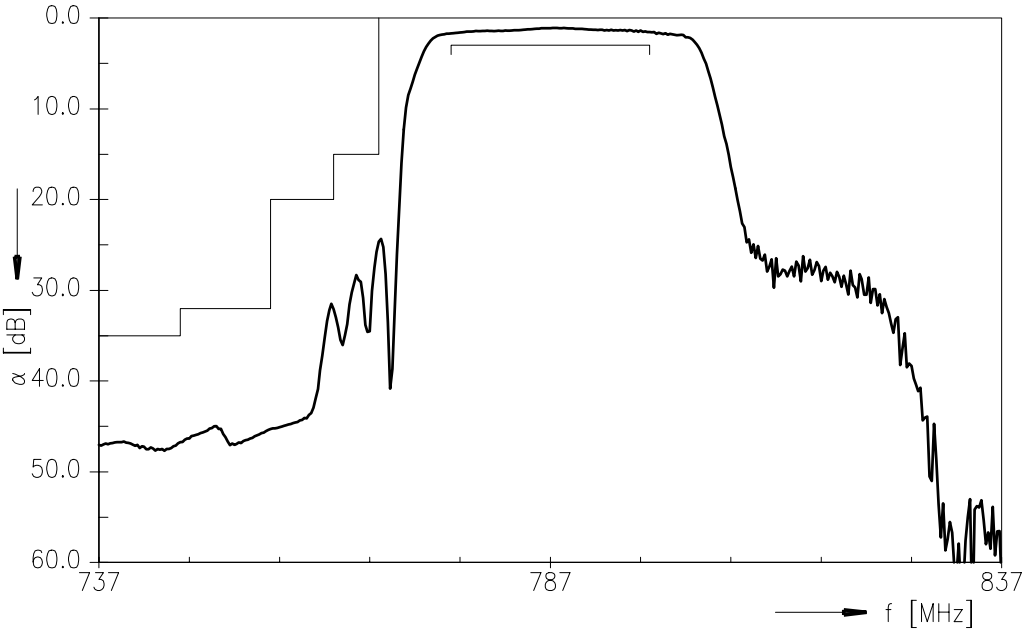
		min.	typ. @ 25 ˚C	max.	
Nominal frequency	f_N	—	787.0	—	MHz
Maximum insertion attenuation	α_{max}				
$f_N \pm 11$ MHz		—	2.1	3.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm 11$ MHz		—	1.0	2.0	dB
Return loss (input / output)					
$f_N \pm 11$ MHz		10.0	12.0	—	dB
Absolute attenuation	α				
0.3 ... 746.0 MHz		35	44	—	dB
746.0 ... 756.0 MHz		32	40	—	dB
756.0 ... 763.0 MHz		20	31	—	dB
763.0 ... 768.0 MHz		15	24	—	dB
860.0 ... 885.0 MHz		35	45	—	dB
885.0 ... 1200.0 MHz		30	43	—	dB
1200.0 ... 2500.0 MHz		20	30	—	dB
2500.0 ... 3500.0 MHz		10	25	—	dB
Temperature coefficient of frequency	TC_f	—	-36	—	ppm/K

Maximum ratings

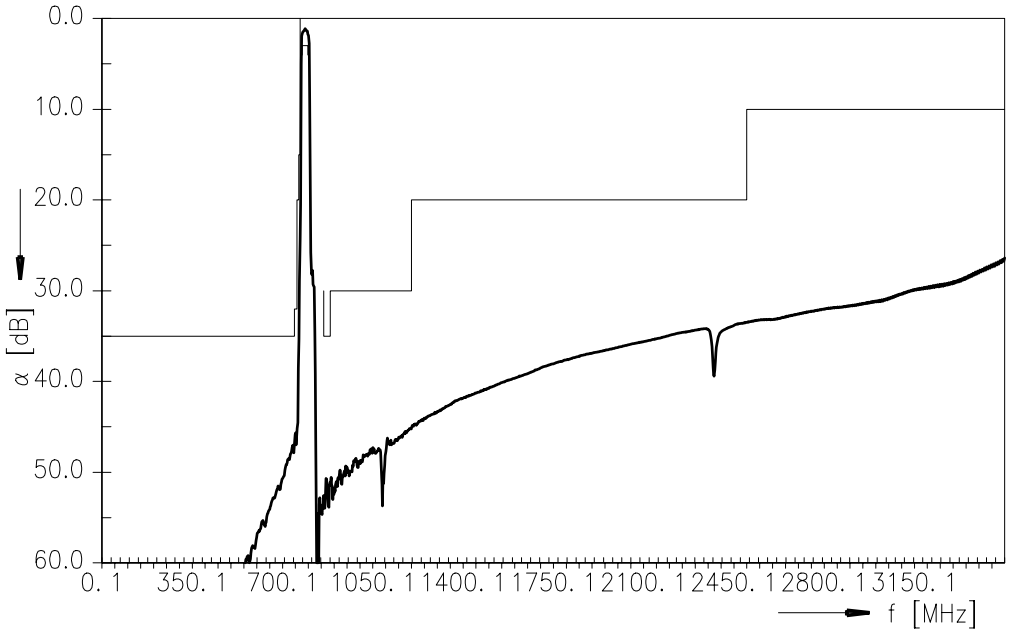
Operable temperature range	T	–40/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	50[1)]	V	machine model, 1 pulse
Input power at				
776.0 ... 798.0 MHz	P_{IN}	15	dBm	cw, 100000hrs, at 85˚C

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

Transfer function



Transfer function (Wide Band)



References

Type	B5113
Ordering code	B39791B5113U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B5113_WB.s2p see file header for port/in assignment table
Soldering profile	S_6001
RoHS compatible	RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8th, 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive") with due regard to the application of exemptions as per Annex III of the Directive in certain cases.

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