



## SAW Components

SAW filter

LTE

<b>Series/type:</b>	<b>B5128</b>
<b>Ordering code:</b>	<b>B39142B5128U410</b>
<b>Date:</b>	<b>February 01, 2010</b>
<b>Version:</b>	<b>2.0</b>



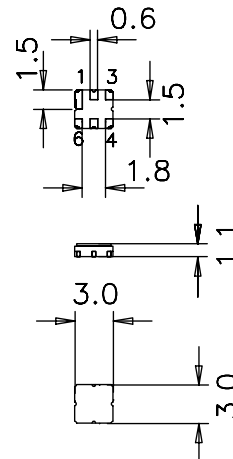
**Application**

- Low-loss RF filter for BTS systems
- Low amplitude ripple
- Usable passband of 37.1 MHz
- Unbalanced to unbalanced operation
- No matching required for operation at 50 Ω



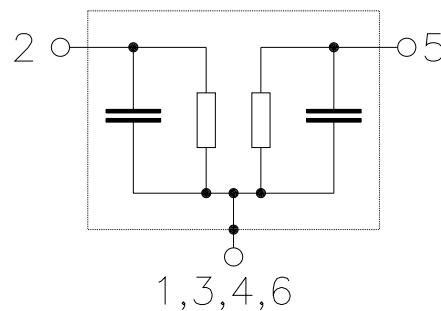
**Features**

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)



**Pin configuration**

- 2 Input
- 5 Output
- 1,3,4,6 Case grounded





Data sheet



**Characteristics**

Temperature range for specification: T = -40 °C to +85 °C  
 Terminating source impedance: Z<sub>S</sub> = 50 Ω  
 Terminating load impedance: Z<sub>L</sub> = 50 Ω

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b>	f <sub>C</sub>	—	—	—	MHz
<b>Maximum insertion attenuation</b>	α <sub>max</sub>				
1427.9 ... 1465.0 MHz		—	2.5	3.0	dB
<b>Amplitude ripple (p-p)</b>	Δα				
1427.9 ... 1465.0 MHz		—	0.8	1.3	dB
<b>Input Return loss</b>					
1427.9 ... 1465.0 MHz		10.0	13.0	—	dB
<b>Output Return loss</b>					
1427.9 ... 1465.0 MHz		8.0	10.0	—	dB
<b>Attenuation</b>	α				
1110.0 ... 1398.0 MHz		20	29	—	dB
1398.0 ... 1408.0 MHz		5	24	—	dB
1600.0 ... 1650.0 MHz		30	54	—	dB



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B5128

SAW filter

1446.45 MHz

Data sheet



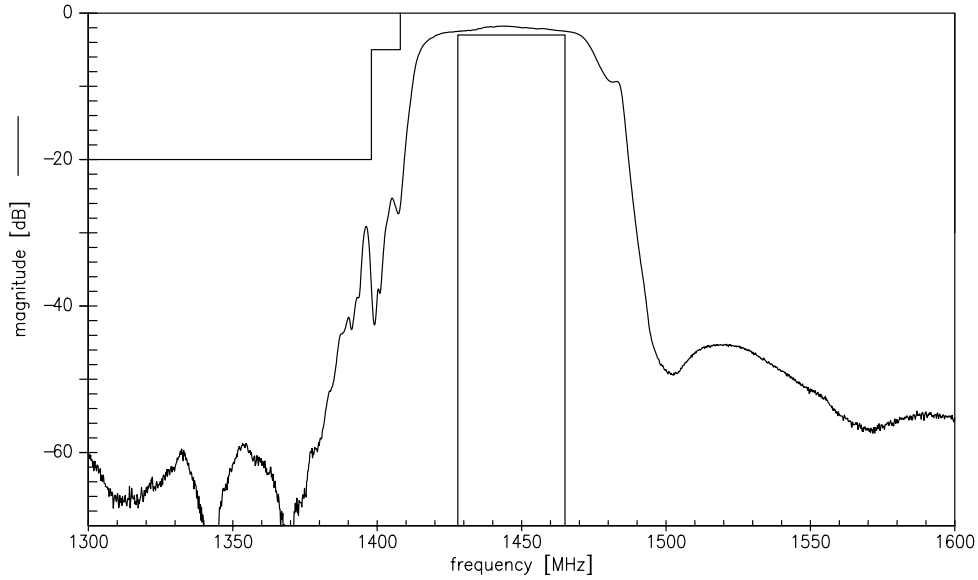
### Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T <sub>stg</sub>	-40/+85	°C	
DC voltage	V <sub>DC</sub>	0	V	
ESD voltage	V <sub>ESD</sub>	50 <sup>1)</sup>	V	machine model, 1 pulse
Input power at 1427.9 ... 1465.0	P <sub>IN</sub>	10	dBm	CW

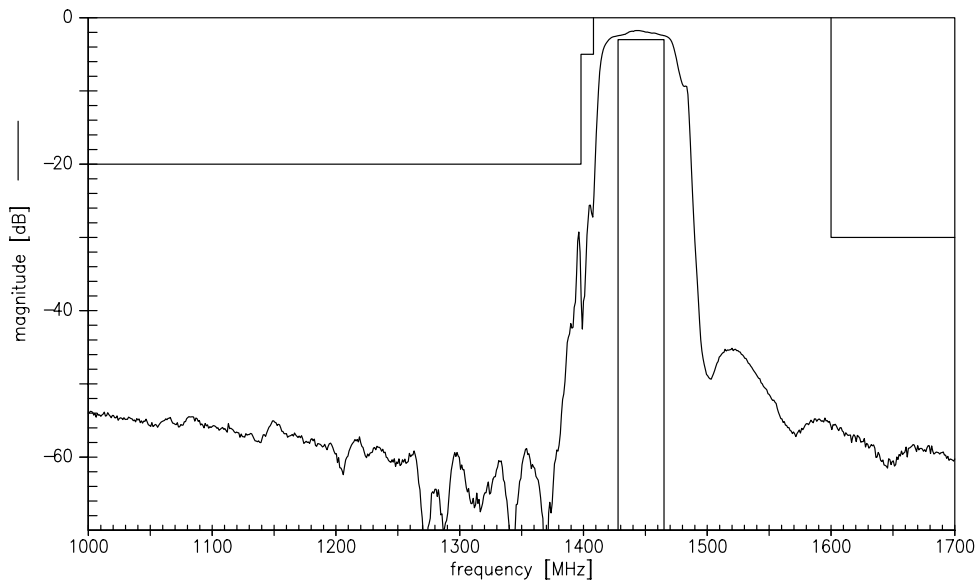
<sup>1)</sup> acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulse.



Transfer function



Transfer function (wideband)



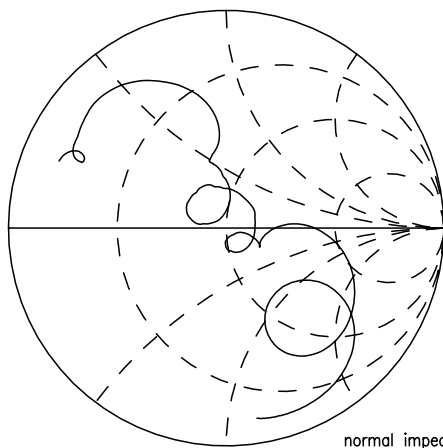


Data sheet

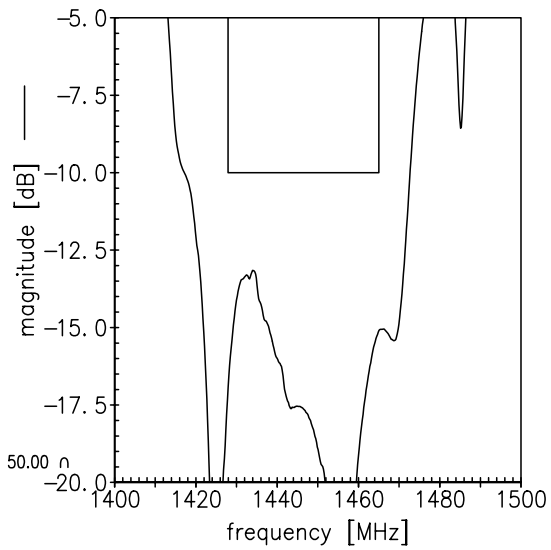


Smith charts

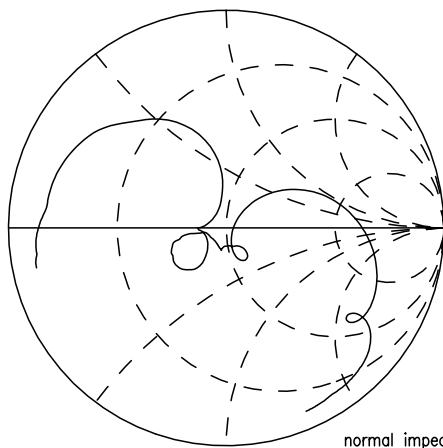
S<sub>11</sub> function



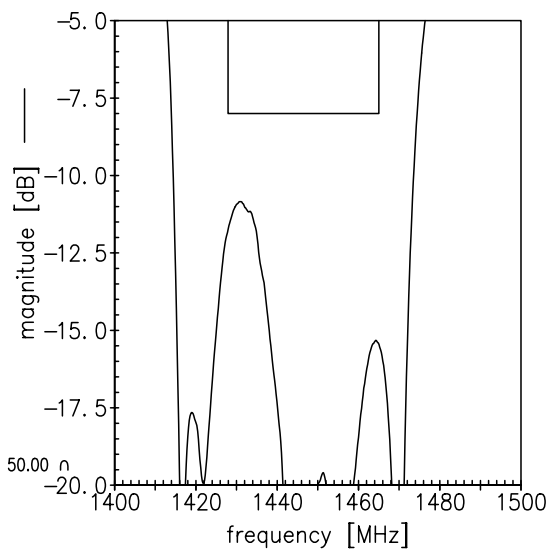
normal impedance: 50.00  $\Omega$



S<sub>22</sub> function



normal impedance: 50.00  $\Omega$





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B5128

SAW filter

1446.45 MHz

Data sheet



## References

Type	B5128
Ordering code	B39142B5128U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5128_NB.s2p B5128_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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