



SAW Components

SAW RF low loss filter

Satellite BTS

Series/type: B1616
Ordering code: B39132B1616U810

Date: December 15, 2006
Version: 2.1

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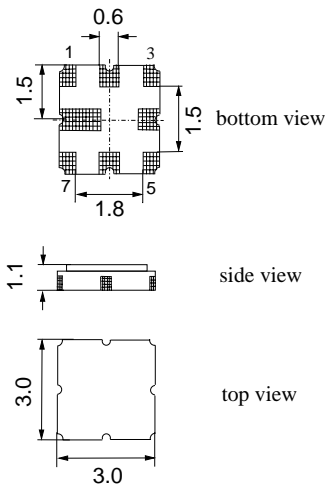
Application

- Low loss RF filter for satellite BTS
- Usable passband 40.0 MHz
- Low insertion attenuation
- Low amplitude ripple
- Low group delay ripple
- Balanced to balanced operation
- No matching network required for operation at 150 Ω



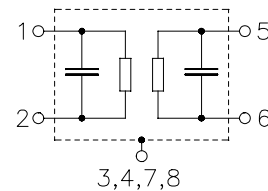
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Maximum height of 1.225 mm
- Package code QCC8D
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

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




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SAW RF low loss filter
1280.18 MHz
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Characteristics

Operating temperature range: $T = -40\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 150\ \Omega$
 Terminating load impedance: $Z_L = 150\ \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	1280.18	—	MHz
Maximum insertion attenuation	α_{\max}	—	3.5	4.5	dB
1260.18 ... 1300.18 MHz					
Pass bandwidth		—	54.0	—	MHz
$\alpha_{\text{rel}} \leq 1.5\text{ dB}$					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1.6	2.3	dB
1260.18 ... 1300.18 MHz					
Group delay ripple (p-p)	$\Delta\tau$	—	23.0	30.0	ns
1260.18 ... 1300.18 MHz					
Deviation from linear phase (rms)		—	4.5	6.0	°
in any 30 MHz band					
1260.18 ... 1300.18 MHz					
Relative attenuation (relative to α_{\max})	α	46.0	55.0	—	dB
50.00 ... 1198.12 MHz					
1362.24 ... 2000.00 MHz		45.0	57.0	—	dB
2000.00 ... 6000.00 MHz		15.0	—	—	dB

Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
Source power	P _S	0	dBm	source impedance 150 Ω



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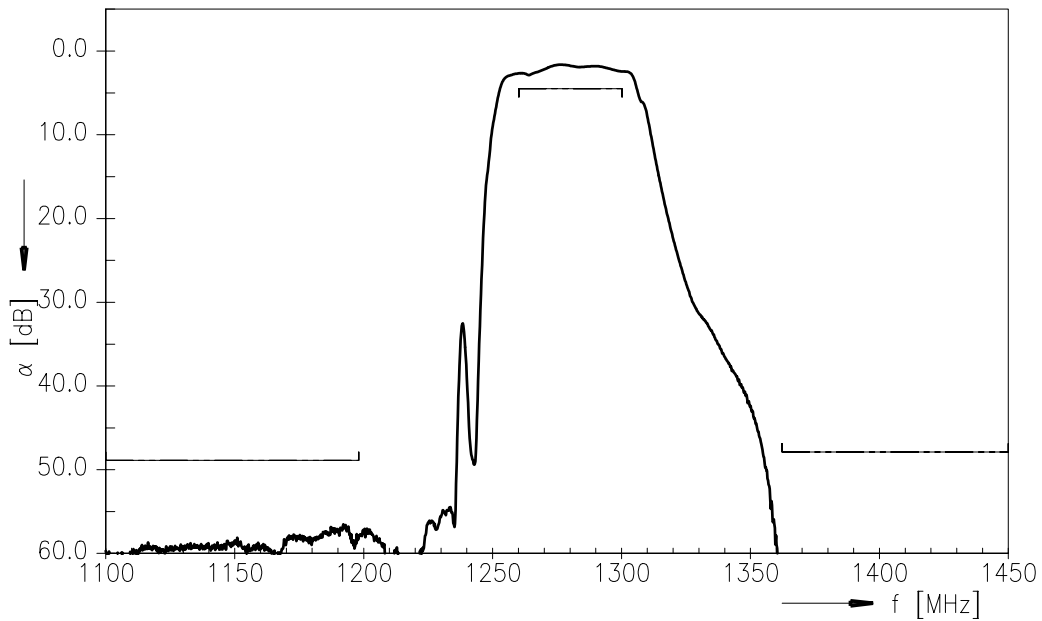
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1280.18 MHz

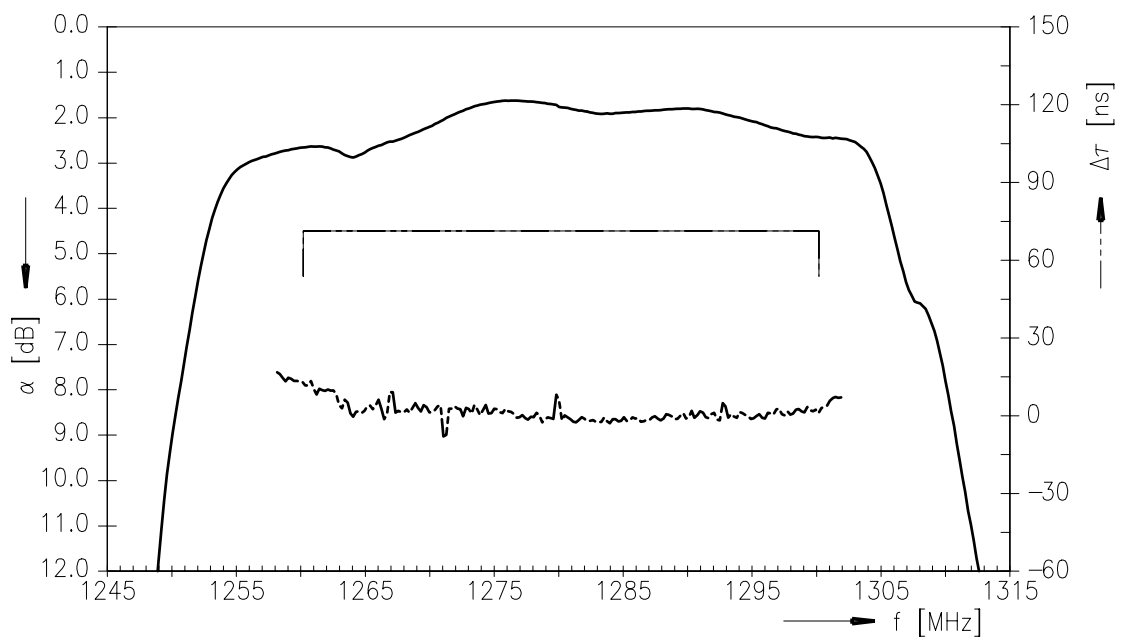
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Transfer function



Transfer function (passband)





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Data Sheet



References

Type	B1616
Ordering code	B39132B1616U810
Marking and package	C61157-A7-A72
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B1616_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."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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