



SAW Components

SAW RF low loss filter

Satellite BTS

Series/type:	B1620
Ordering code:	B39142B1620U810
Date:	July 01, 2008
Version:	2.3



Data Sheet



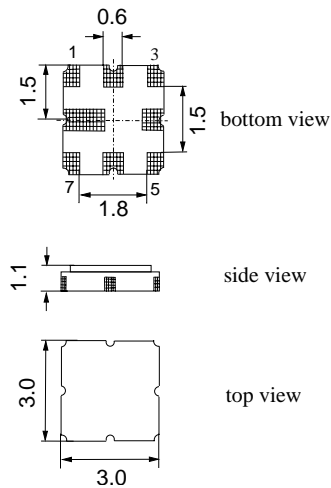
Application

- 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



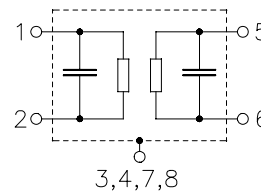
Features

- 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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B1620
SAW RF low loss filter
1382.24 MHz
Data Sheet

Characteristics

Operating temperature range:	T = -40 °C to +85 °C
Terminating source impedance:	Z _S = 150 Ω
Terminating load impedance:	Z _L = 150 Ω

		min.	typ. @ 25 °C	max.	
Nominal frequency	f _N	—	1382.24	—	MHz
Maximum insertion attenuation 1362.24 ... 1402.24 MHz	α _{max}	—	3.5	4.5	dB
Pass bandwidth α _{rel} ≤ 1.5 dB	B _{1.5 dB}	—	58.5	—	MHz
Amplitude ripple (p-p) 1362.24 ... 1402.24 MHz	Δα	—	1.2	2.3	dB
Group delay ripple (p-p) 1362.24 ... 1402.24 MHz	Δτ	—	13.0	25.0	ns
Differential to common mode ratio (S _{dd21} /S _{cd21})		11	13	—	dB
Deviation from linear phase (rms) in any 30 MHz band 1362.24 ... 1402.24 MHz		—	3.5	5.5	°
Relative attenuation (relative to α_{max})	α				
50.00 ... 1300.18 MHz		46.0	55.0	—	dB
1464.30 ... 1490.00 MHz		40.0	44.0	—	dB
1490.00 ... 2000.00 MHz		46.0	55.0	—	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

Please read *cautions and warnings and important notes* at the end of this document.



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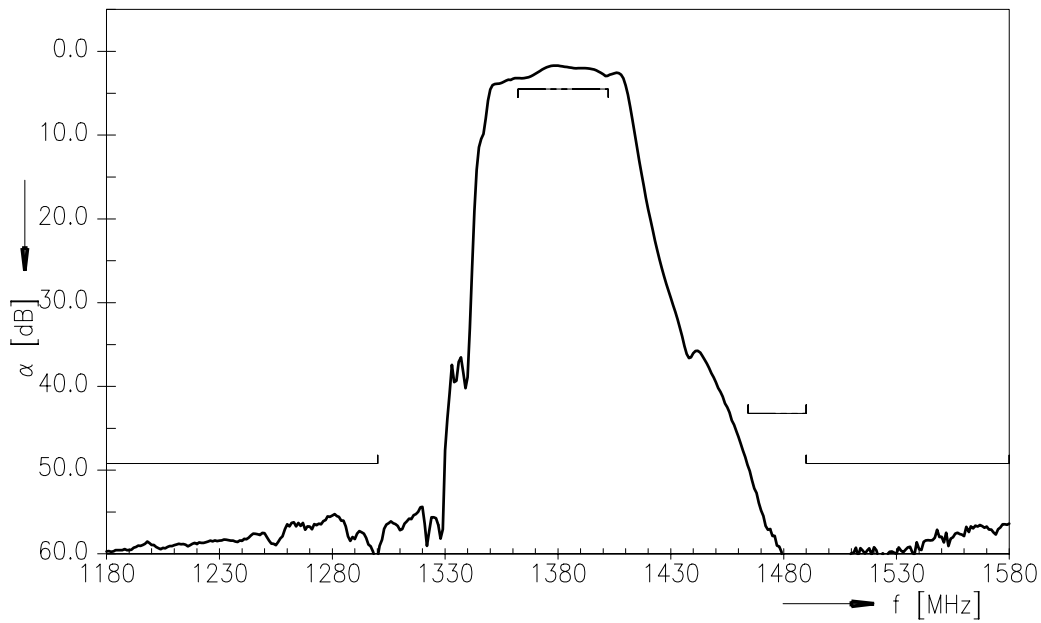
SAW RF low loss filter

1382.24 MHz

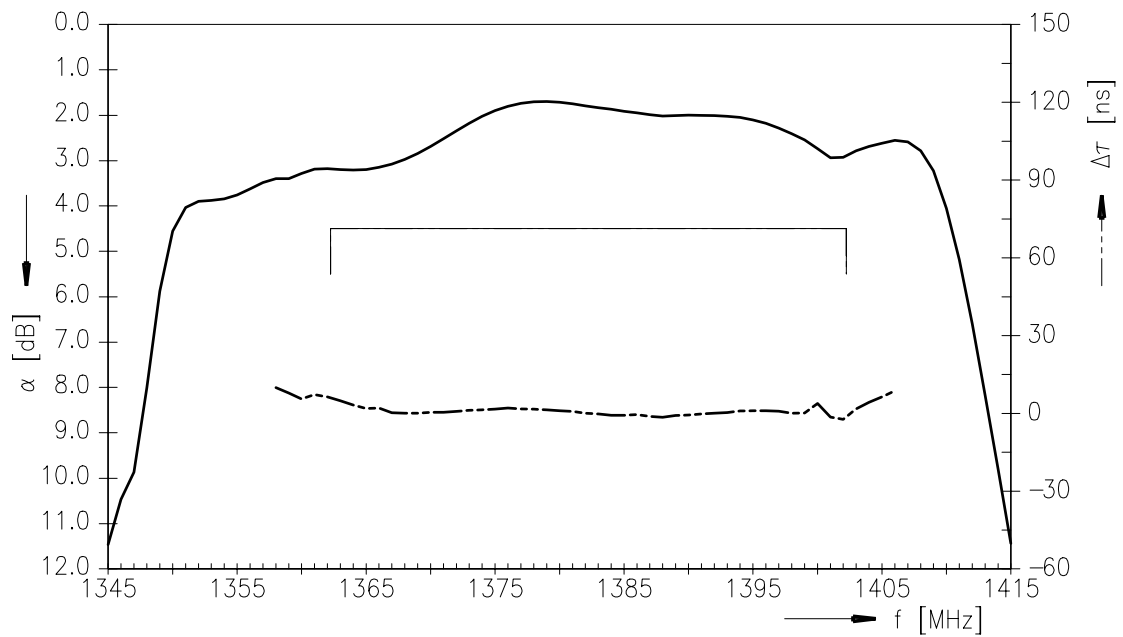
Data Sheet



Transfer function



Transfer function (passband)



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SAW Components

B1620

SAW RF low loss filter

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Data Sheet



References

Type	B1620
Ordering code	B39142B1620U810
Marking and package	C61157-A7-A72
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B1620_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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