



SAW Components

SAW RF low loss filter

Satellite CSS

Series/type:	B1626
Ordering code:	B39182B1626U810
Date:	April 30, 2007
Version:	2.2



Data Sheet



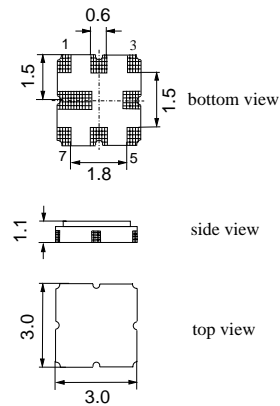
Application

- Low-loss RF filter for satellite CSS
- Balanced to balanced operation
- Low insertion attenuation
- Low amplitude ripple
- Low group delay ripple
- Usable passband 40.0 MHz



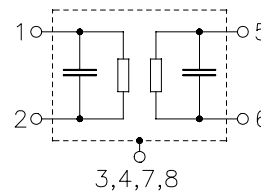
Features

- 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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1790.48 MHz

Data Sheet



Characteristics

Temperature range for specification: $T = -40\text{ °C to }+85\text{ °C}$

Terminating source impedance: $Z_S = 150\ \Omega$

Terminating load impedance: $Z_L = 150\ \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	1790.48	—	MHz
Maximum insertion attenuation 1770.48 ... 1810.48 MHz	α_{max}	—	4.9	5.5	dB
Pass bandwidth $\alpha_{rel} \leq 1.5\text{dB}$	$B_{1.5\text{dB}}$	—	57.0	—	MHz
Amplitude ripple (p-p) 1770.48 ... 1810.48 MHz	$\Delta\alpha$	—	2.1	2.7	dB
Group delay ripple (p-p) 1770.48 ... 1810.48 MHz	$\Delta\tau$	—	5.0	20.0	ns
Deviation from linear phase (rms) in any 30MHz band 1770.48 ... 1810.48 MHz	$\Delta\tau$	—	1.5	3.5	
Relative attenuation (relative to α_{max}) 50.0 ... 1708.42 MHz	α	46.0	51.0	—	dB
1872.54 ... 1900.00 MHz		39.0	50.0	—	dB
1900.00 ... 2000.00 MHz		45.0	58.0	—	
2000.00 ... 6000.00 MHz		20.0	—	—	



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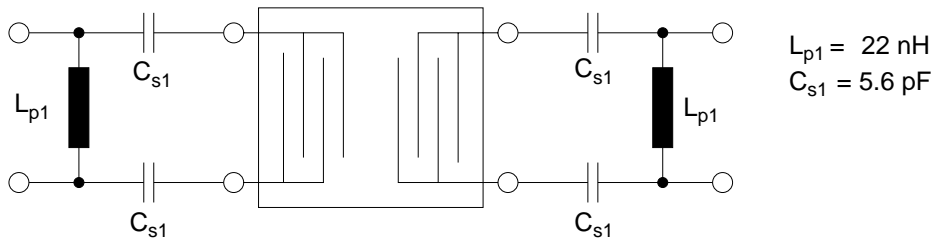


Characteristics

Temperature range for specification: $T = -40\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 150\ \Omega$ and matching network
 Terminating load impedance: $Z_L = 150\ \Omega$ and matching network

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	1790.48	—	MHz
Maximum insertion attenuation 1770.48 ... 1810.48 MHz	α_{max}	—	4.2	5.5	dB
Pass bandwidth $\alpha_{rel} \leq 1.5\text{dB}$	$B_{1.5\text{dB}}$	—	57.0	—	MHz
Amplitude ripple (p-p) 1770.48 ... 1810.48 MHz	$\Delta\alpha$	—	0.8	1.5	dB
Group delay ripple (p-p) 1770.48 ... 1810.48 MHz	$\Delta\tau$	—	8.0	20.0	ns
Deviation from linear phase (rms) in any 30MHz band 1770.48 ... 1810.48 MHz	$\Delta\tau$	—	1.5	3.5	
Relative attenuation (relative to α_{max})	α				
50.0 ... 1708.42 MHz		45.0	50.0	—	dB
1872.54 ... 1900.00 MHz		37.0	46.0	—	dB
1900.00 ... 2000.00 MHz		45.0	56.0	—	
2000.00 ... 6000.00 MHz		20.0	—	—	

Matching network (element values depend on PCB layout)



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



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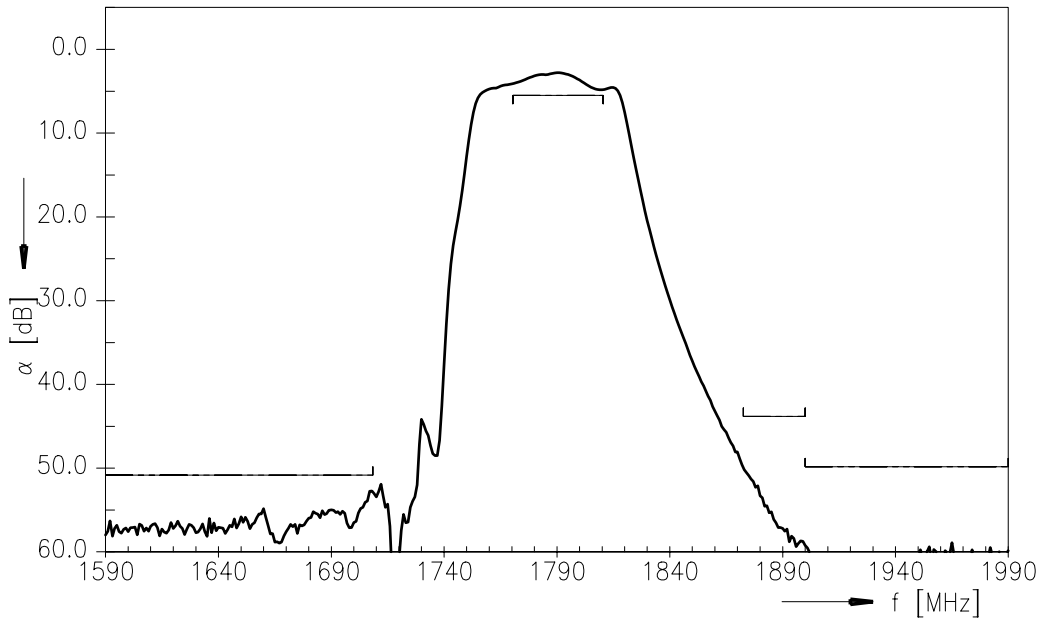
Characteristics

Maximum ratings

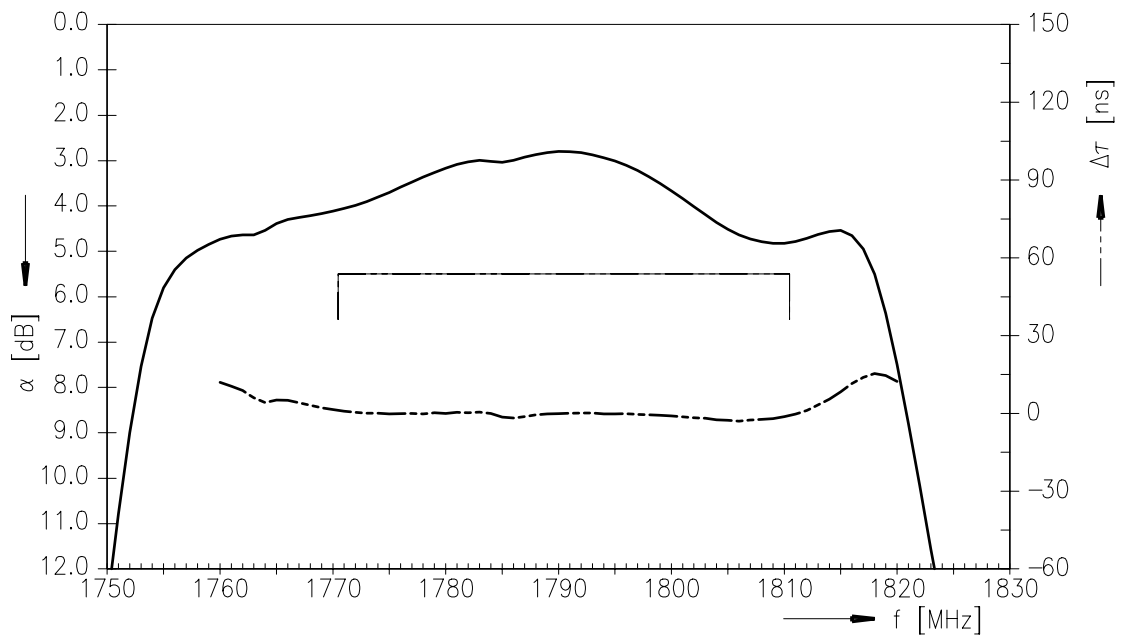
Operable temperature range	T	-40/+85	°C	
Storage temperature range	Tstg	-40/+85	°C	
DC voltage	V _{DC}	0	V	
Source power	P _S	0	dBm	source impedance 150 Ω



Transfer function S_{21} without matching network



Transfer function S_{21} (passband) without matching network





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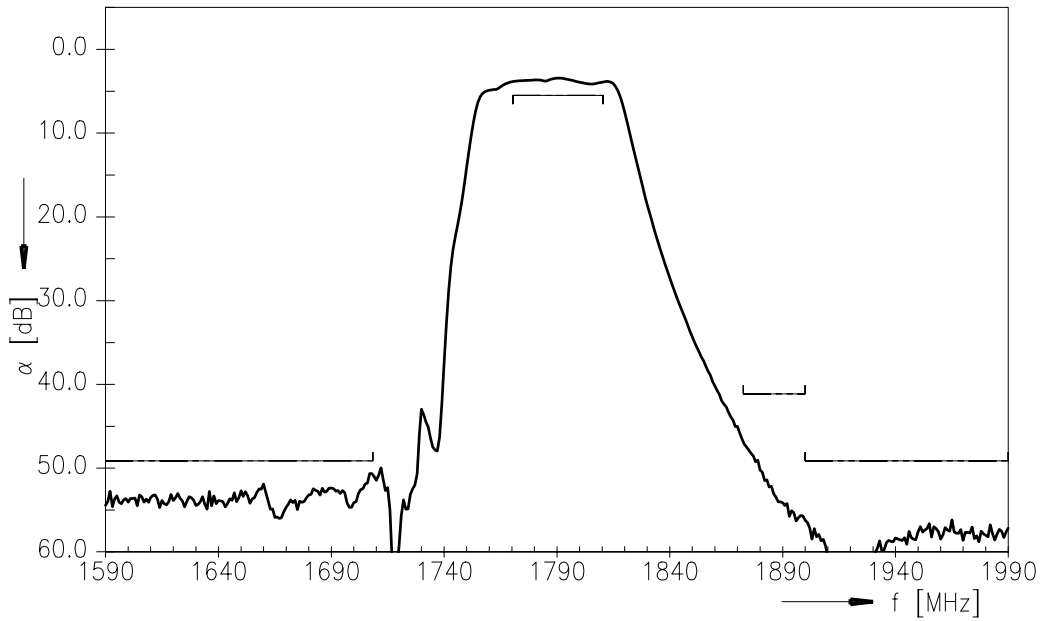
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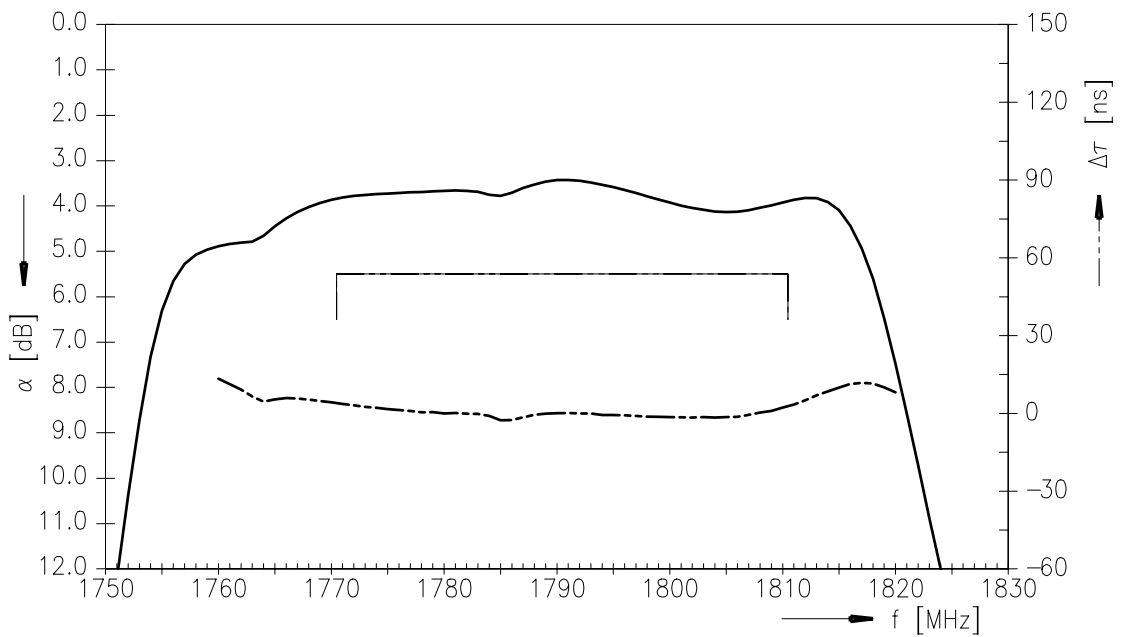
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Transfer function S_{21} (passband) with matching network



Transfer function S_{21} (passband) with matching network



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References

Type	B1626
Ordering code	B39182B1626U810
Marking and package	C61157-A7-A72
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B1626_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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