



SAW Components

SAW RF low loss filter

Satellite CSS

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



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B1626

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1790.48 MHz

Data Sheet



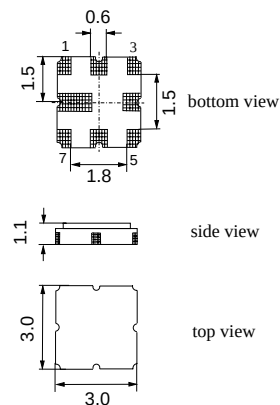
Application

- 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



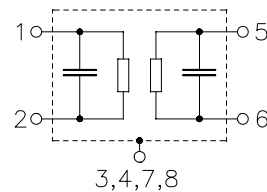
Features

- 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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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	$\alpha_{\max}$	—	4.9	5.5	dB
1770.48 ... 1810.48 MHz					
Pass bandwidth	$B_{1.5\text{dB}}$	—	57.0	—	MHz
$\alpha_{\text{rel}} \leq 1.5\text{dB}$					
Amplitude ripple (p-p)	$\Delta\alpha$	—	2.1	2.7	dB
1770.48 ... 1810.48 MHz					
Group delay ripple (p-p)	$\Delta\tau$	—	5.0	20.0	ns
1770.48 ... 1810.48 MHz					
Deviation from linear phase (rms)	$\Delta\tau$	—	1.5	3.5	
in any 30MHz band					
1770.48 ... 1810.48 MHz					
Relative attenuation (relative to $\alpha_{\max}$)	α				
50.0 ... 1708.42 MHz		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:

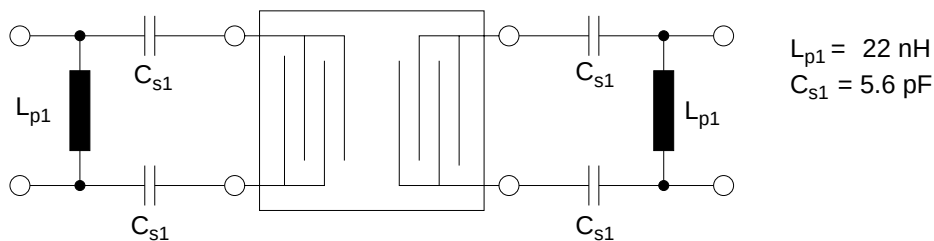
$Z_S = 150\ \Omega$ and matching network

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	$\alpha_{\max}$	—	4.2	5.5	dB
1770.48 ... 1810.48 MHz					
Pass bandwidth	$B_{1.5\text{dB}}$	—	57.0	—	MHz
$\alpha_{\text{rel}} \leq 1.5\text{dB}$					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.8	1.5	dB
1770.48 ... 1810.48 MHz					
Group delay ripple (p-p)	$\Delta\tau$	—	8.0	20.0	ns
1770.48 ... 1810.48 MHz					
Deviation from linear phase (rms)	$\Delta\tau$	—	1.5	3.5	
in any 30MHz band					
1770.48 ... 1810.48 MHz					
Relative attenuation (relative to $\alpha_{\max}$)	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	—	—	

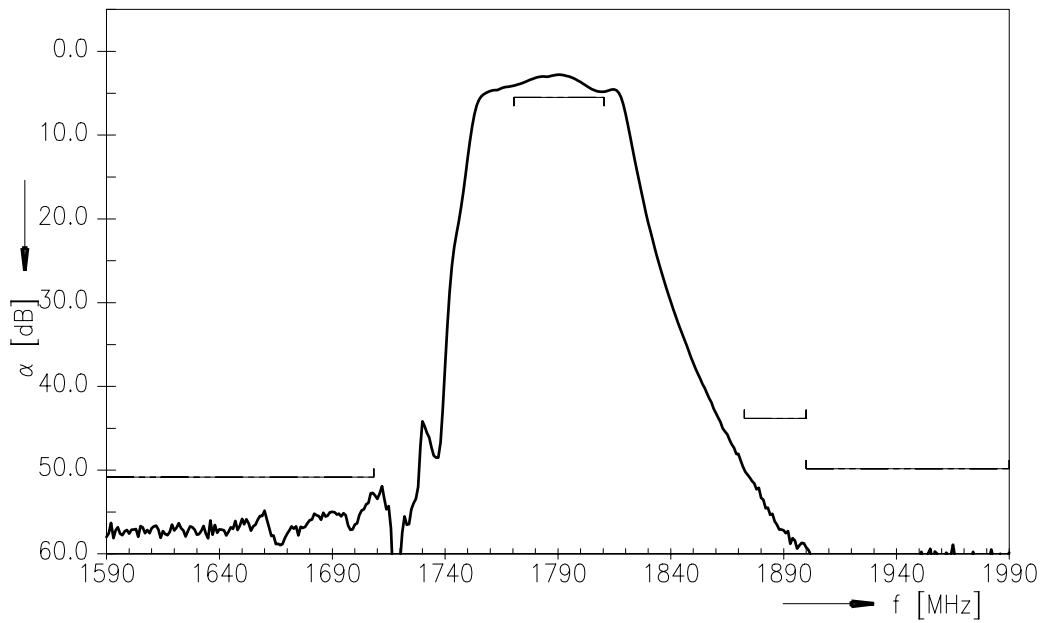
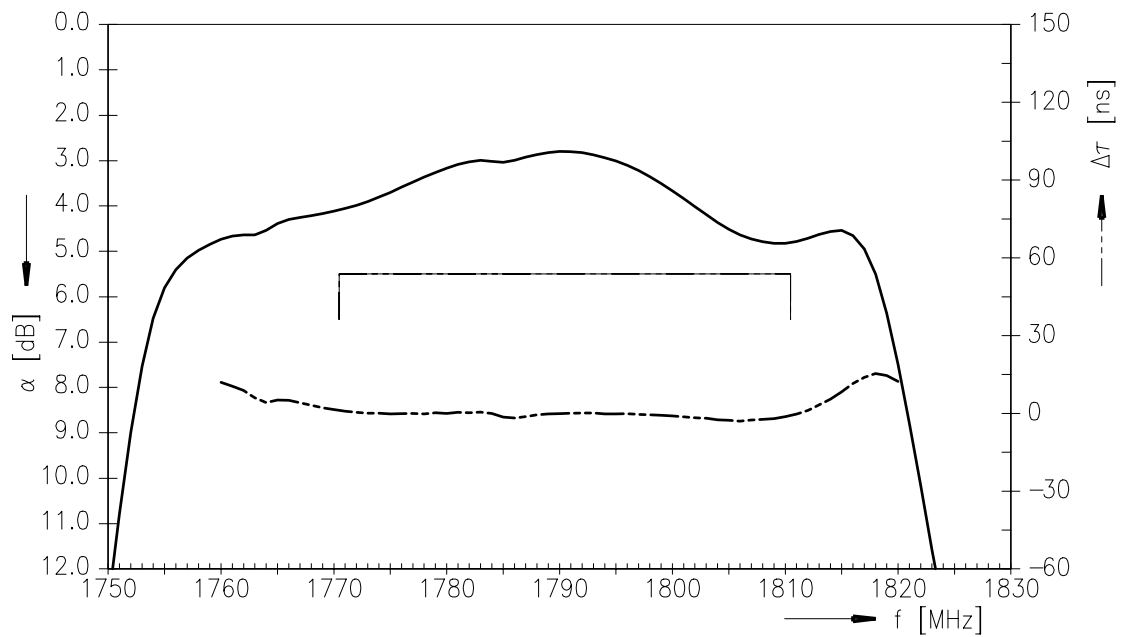
Matching network (element values depend on PCB layout)



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

**SAW Components****B1626****SAW RF low loss filter****1790.48 MHz****Data Sheet****Characteristics****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

**SAW Components****B1626****SAW RF low loss filter****1790.48 MHz****Data Sheet****Transfer function S_{21} without matching network****Transfer function S_{21} (passband) without matching network**

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



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B1626

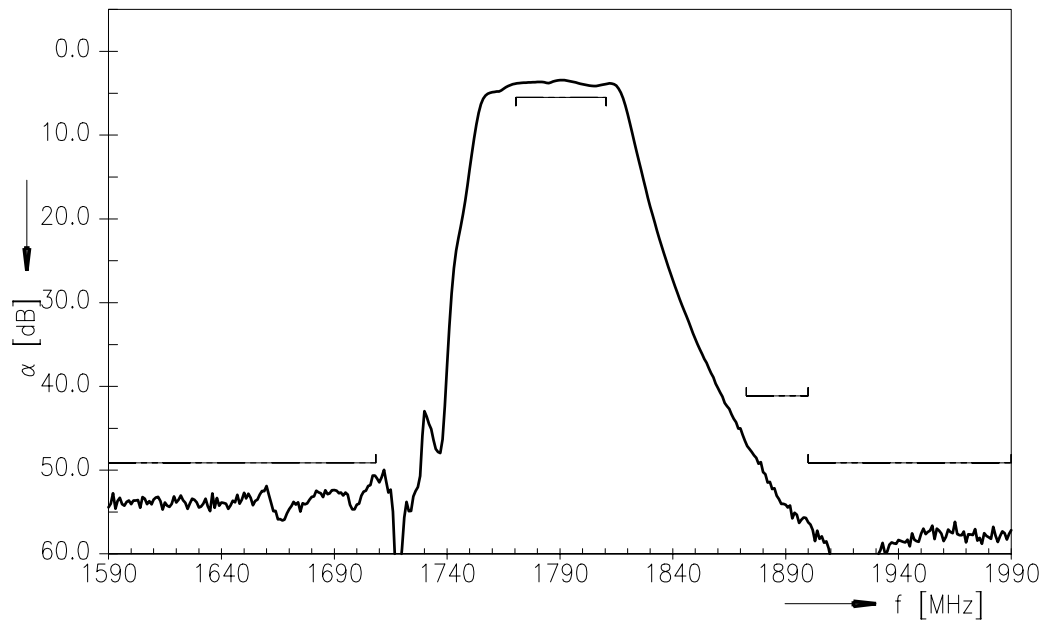
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1790.48 MHz

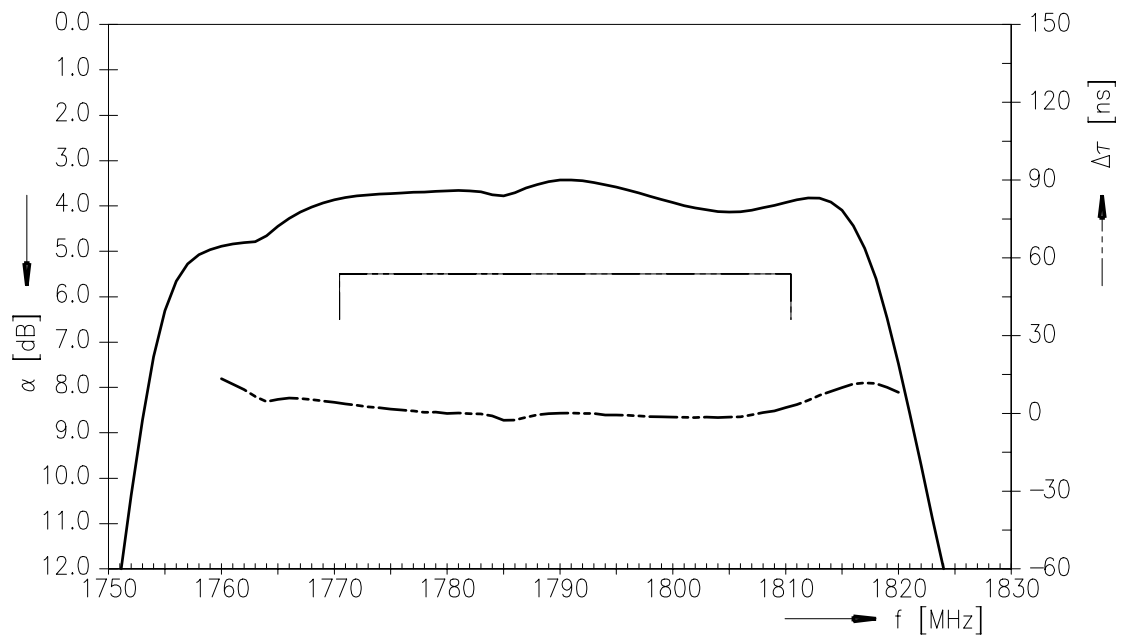
Data Sheet



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 .

**Published by EPCOS AG
Surface Acoustic Wave Components Division
P.O. Box 80 17 09, 81617 Munich, GERMANY**

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

8 April 30, 2007



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