



SAW Components

SAW Rx Filter

DECT

Series/Type:	B9479
Ordering code:	B39192B9479P810
Date:	February 27, 2012
Version:	2.2



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B9479

SAW Rx filter

1890.0 MHz

Data sheet



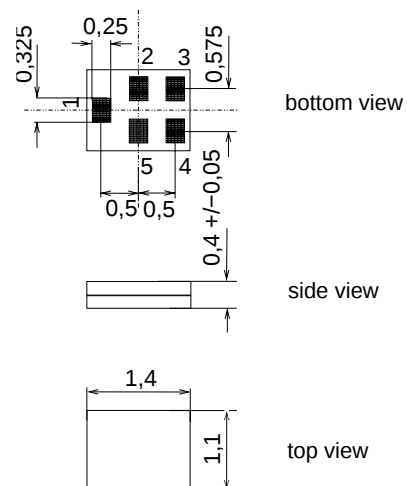
Application

- Low-loss DECT filter for Femtocell, Receive path (Rx)
- Usable passband 20 MHz
- No matching network required for operation at 50 Ω



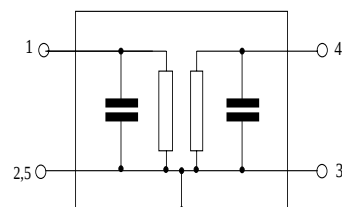
Features

- Package size 1.4 x 1.1 x 0.4 mm³
- RoHS compatible
- Approx. weight 0.003 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)
- Moisture Sensitive Level 3



Pin configuration

- 1 Input
- 4 Output
- 2,3,5 Case ground





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Characteristics

Temperature range for specification: $T = -30$ to $+85$ °C

Terminating source impedance: $Z_S = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ. @ 25°C	max.	
Center frequency	f_C	—	1890.0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2.1	4.2	dB
1880.0 ... 1900.0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.8	2.4	dB
1880.0 ... 1900.0 MHz					
Input VSWR		—	1.7:1	2.3:1	
1880.0 ... 1900.0 MHz					
Output VSWR		—	1.8:1	2.3:1	
1880.0 ... 1900.0 MHz					
Attenuation	α				
824.0 ... 915.0 MHz		25	36	—	dB
1710.0 ... 1785.0 MHz		25	37	—	dB
1920.0 ... 1980.0 MHz		15	30	—	dB



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Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
	V _{ESD}	150 ²⁾	V	human body model, 1 pulse
Input Power at 1800 .. 1900 MHz	P _{IN}	17 ³⁾	dBm	DECT CATiq (50,000 hrs @ 55°C)
		18 ⁴⁾	dBm	DECT CATiq (20,000 hrs @ 55°C)

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

²⁾ acc. to JESD22-A114B (human body model), 1 negative & 1 positive pulse.

³⁾ Duty cycle 25% On state power - 23dBm

⁴⁾ Duty cycle 25% On state power - 24dBm



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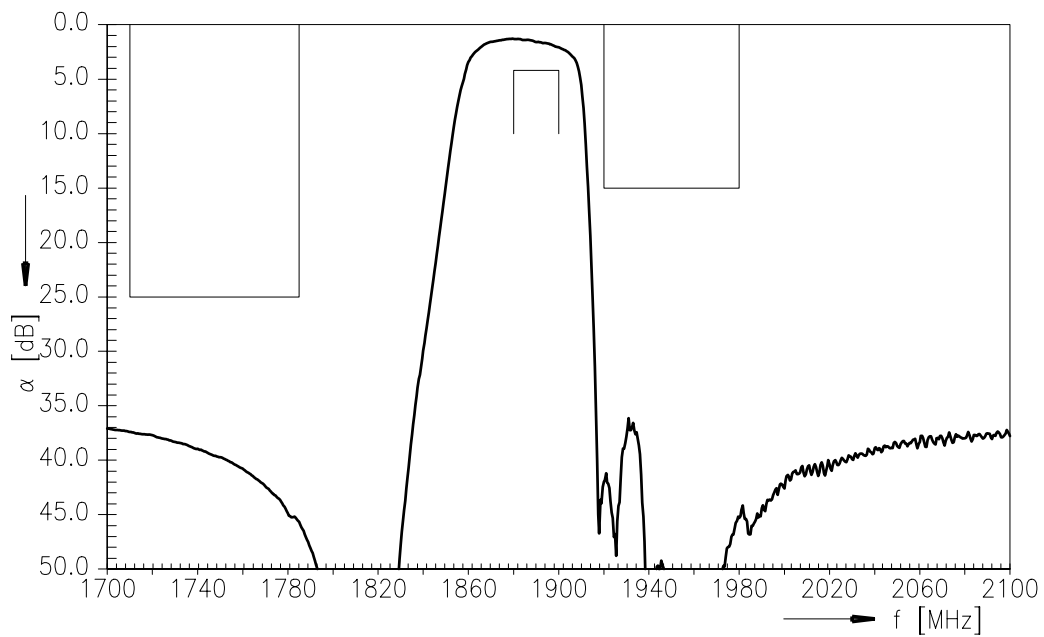
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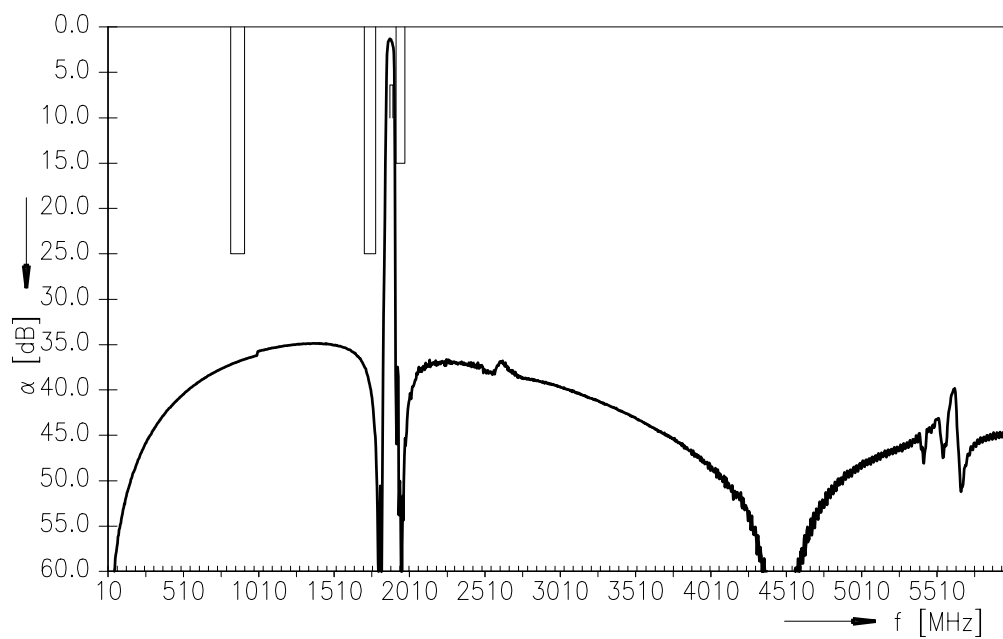
Data sheet



Transfer function (narrowband)



Transfer function (wideband)



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



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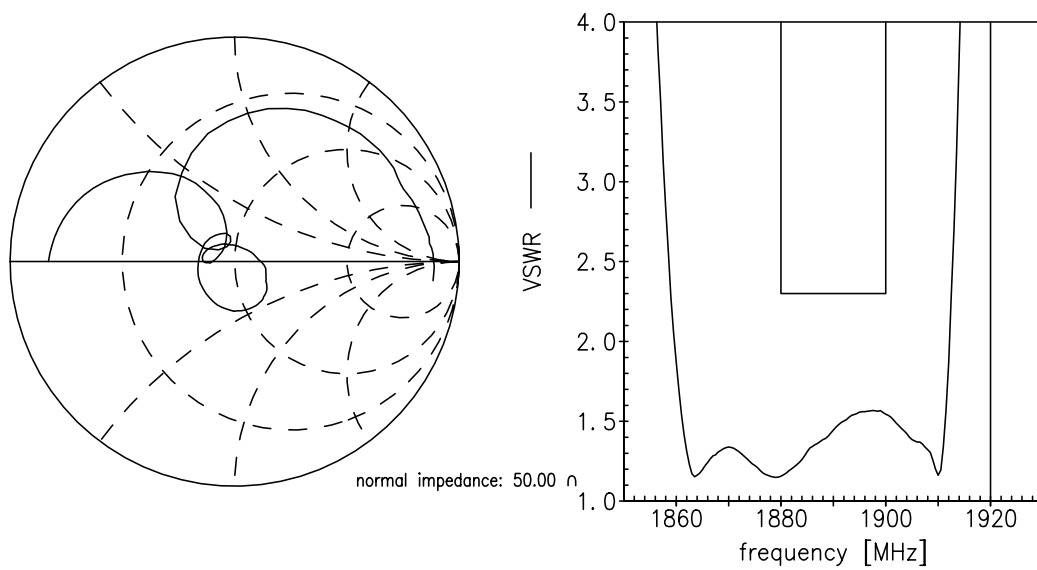
1890.0 MHz

Data sheet

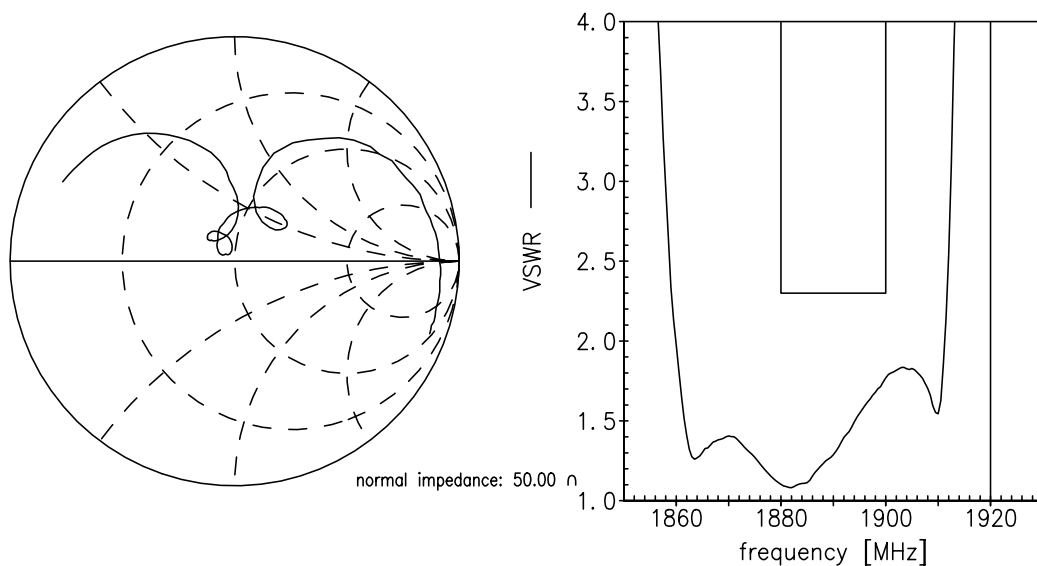


Smith chart

S_{11} function



S_{22} function



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Data sheet

**References**

Type	B9479
Ordering code	B39192B9479P810
Marking and package	C61157-A8-A3
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B9479_NB.s2p B9479_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."
Matching coils	See http://www.tdk.co.jp/tefe02/coil.htm#aname1 http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

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