



SAW Components

SAW Rx filter

CDMA 450

Series/type:	B4962
Ordering code:	B39461-B4962-U510
Date:	February 24, 2009
Version:	2.1

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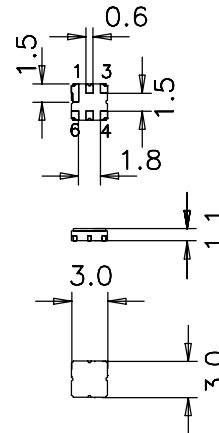
Application

- Low-loss RF filter for mobile telephone CDMA 450 systems, receive path (Rx)
- Impedance transformation from $50\ \Omega$ to $100\ \Omega$
- Unbalanced to balanced operation
- No external matching required
- Low amplitude ripple
- Usable passband 5 MHz



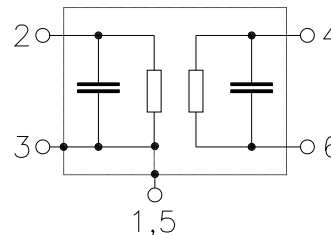
Features

- Package size $3.0 \times 3.0 \times 1.1\ \text{mm}^3$
- Package code DCC6D
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

- 2 Input unbalanced
- 4,6 Output balanced
- 1,3,5 To be grounded





Data Sheet



Characteristics

Temperature range for specification: $T = -10\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 100\ \Omega$ (balanced)

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	462.50	—	MHz
Maximum insertion attenuation	α_{max}				
460.0 ... 465.0 MHz		—	2.2	2.5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
460.0 ... 465.0 MHz		—	0.8	1.0	dB
Input VSWR					
460.0 ... 465.0 MHz		—	1.5	1.9	
Output VSWR					
460.0 ... 465.0 MHz		—	1.5	1.9	
Output amplitude balance (S_{31}/S_{21})					
460.0 ... 465.0 MHz		-0.5	-0.05/ +0.25	0.5	dB
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
460.0 ... 465.0 MHz		-3	-2.0/ +2.6	5	°
Attenuation	α				
0.0 ... 440.0 MHz		53	62	—	dB
440.0 ... 450.0 MHz		40	57	—	dB
450.0 ... 455.0 MHz		30	33	—	dB
485.0 ... 495.0 MHz		23	32	—	dB
495.0 ... 530.0 MHz		42	51	—	dB
530.0 ... 1200.0 MHz		48	53	—	dB
1200.0 ... 1500.0 MHz		40	47	—	dB
1500.0 ... 2200.0 MHz		30	34	—	dB
2200.0 ... 3000.0 MHz		18	20	—	dB



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462.50 MHz

Data Sheet



Maximum ratings

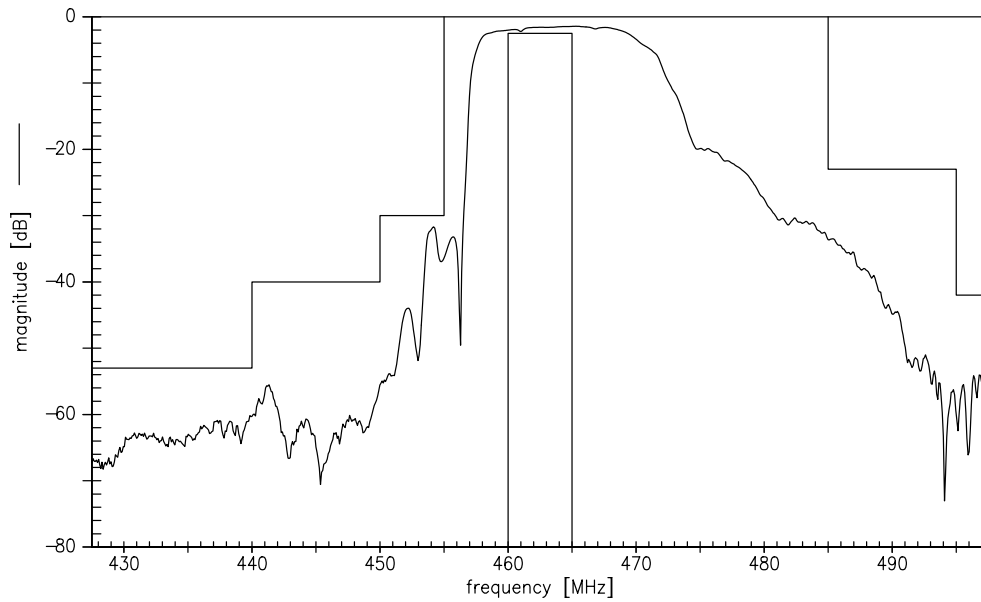
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	100 ¹⁾	V	machine model, 10 pulses
Input power at CDMA450	P _{IN}	17	dBm	CW

¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.

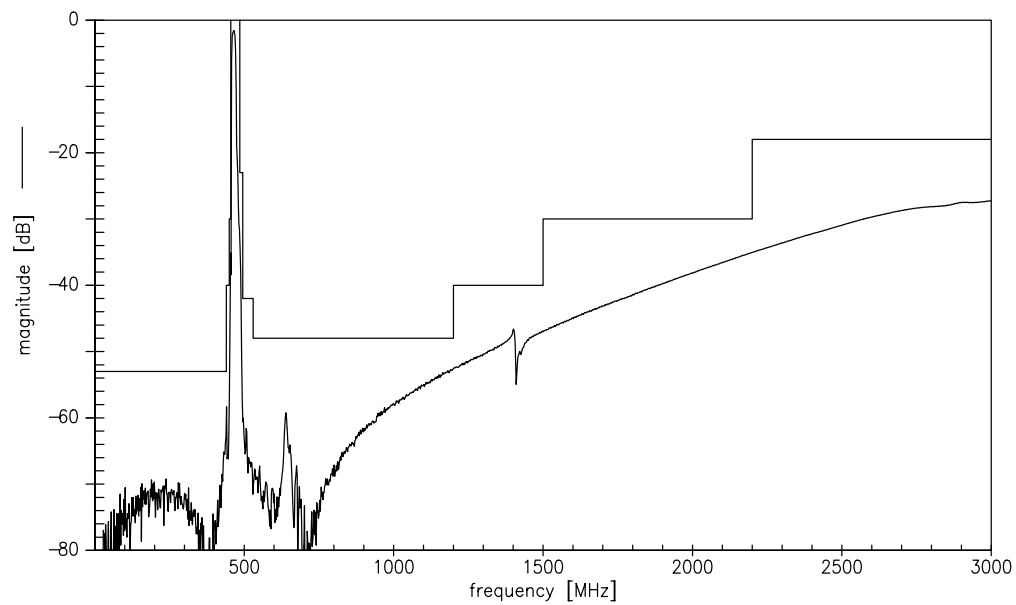
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Transfer function



Transfer function (wideband)



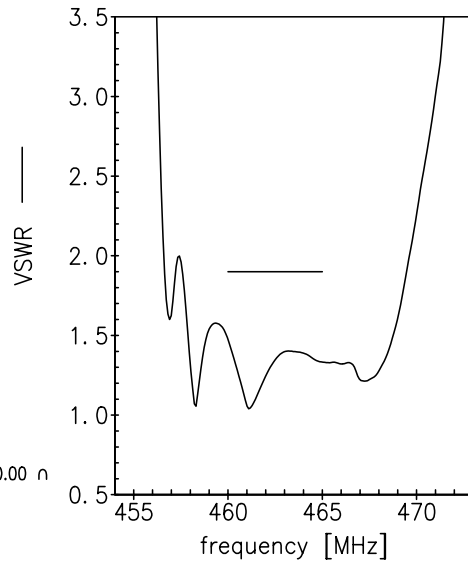
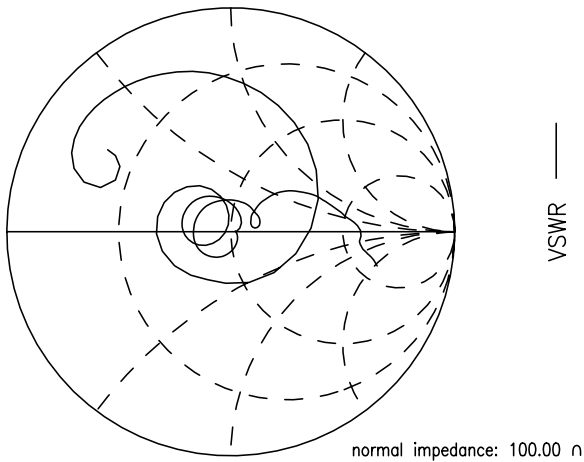
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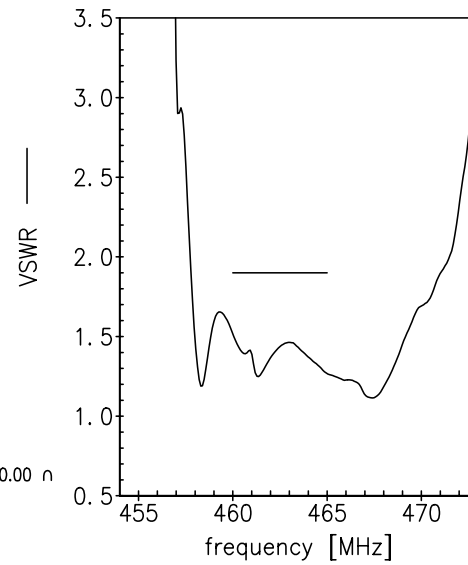
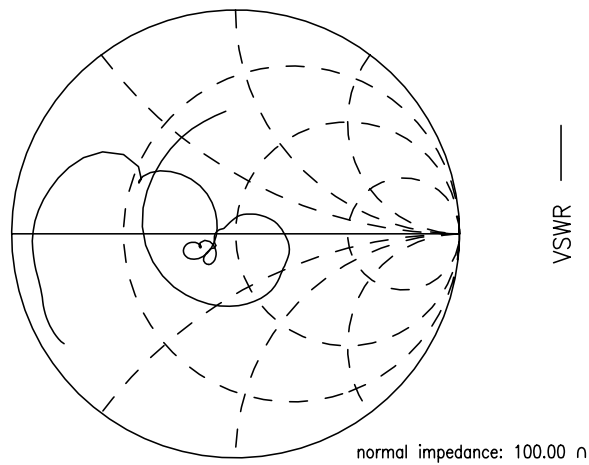


Smith charts

S_{11} function



S_{22} function



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462.50 MHz

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References

Type	B4962
Ordering code	B39461-B4962-U510
Marking and package	C61157-A7-A68
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B4962_NB.s3p B4962_WB.s3p
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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7 February 24, 2009



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