



SAW Components

SAW RF filter

CDMA450

Series/type:	B5061
Ordering code:	B39451B5061U410
Date:	October 01, 2010
Version:	2.0



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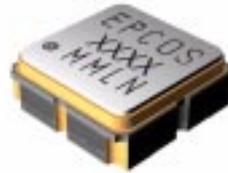
453.7375 MHz

Data sheet

SMD

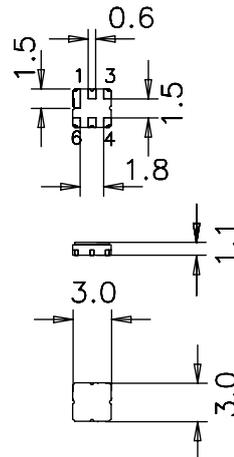
Application

- Low-loss RF filter for CDMA base station
- Unbalanced to unbalanced operation
- Low amplitude ripple
- Usable passband of 7.475 MHz
- No matching required for operation at 50 Ω



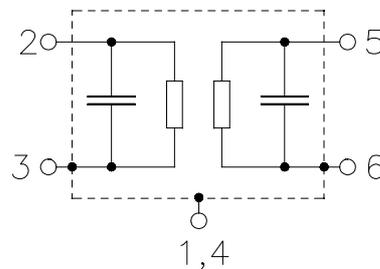
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- 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
- 5 Output
- 1, 3, 4, 6 Ground



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



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Characteristics

Operating temperature: $T = -40\text{ °C to }85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	453.7375	—	MHz
Maximum insertion attenuation	α_{max}				
	450.000 MHz...457.475 MHz	—	2.2	3.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	450.000 MHz...457.475 MHz	—	0.6	1.5	dB
Input VSWR					
	450.000 MHz...457.475 MHz	—	1.6	2.0	
Output VSWR					
	450.000 MHz...457.475 MHz	—	1.7	2.0	
Absolute attenuation	α				
	20.000 MHz ... 403.737 MHz	43	48	—	dB
	460.000 MHz ... 467.500 MHz	1	2.5	—	dB
	496.080 MHz ... 503.555 MHz	35	48	—	dB
	542.160 MHz ... 549.635 MHz	35	48	—	dB
	900.000 MHz ... 914.950 MHz	30	36	—	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}	100 ¹⁾	V	machine model, 1 pulse
Input power at 450.000 MHz...457.475 MHz	P _{IN}	10	dBm	10000hours, continuous wave

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



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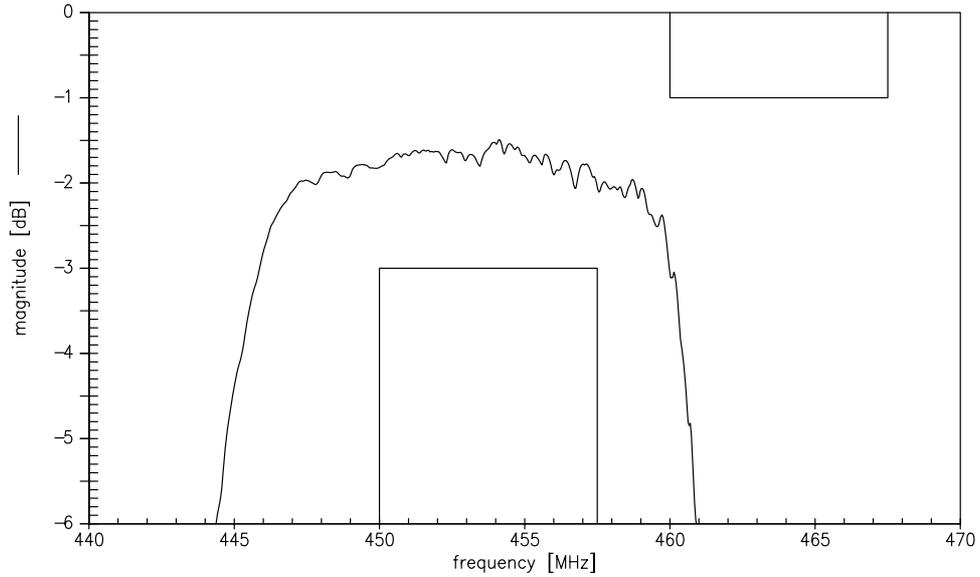
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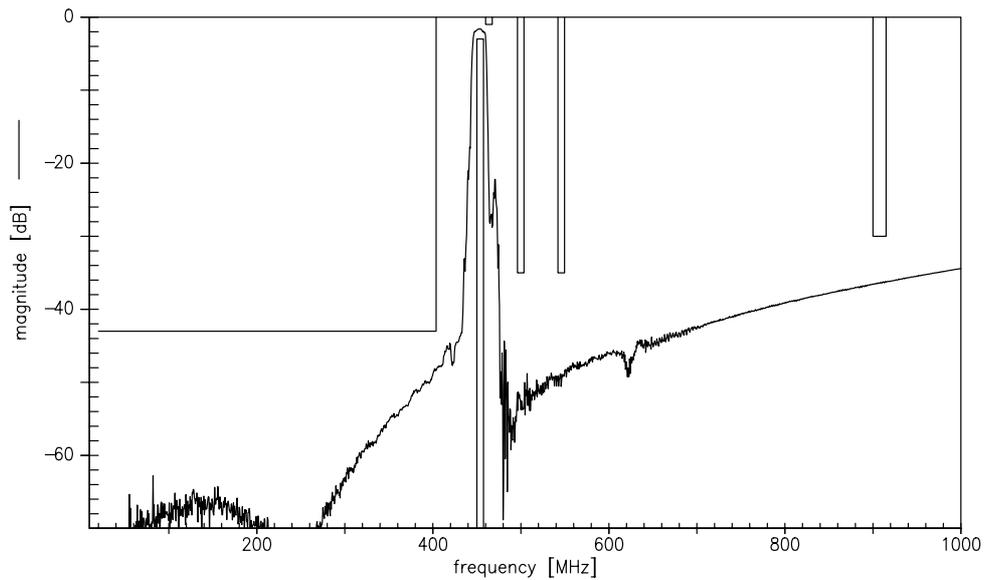
Data sheet



Transfer function



Transfer function (wideband)



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



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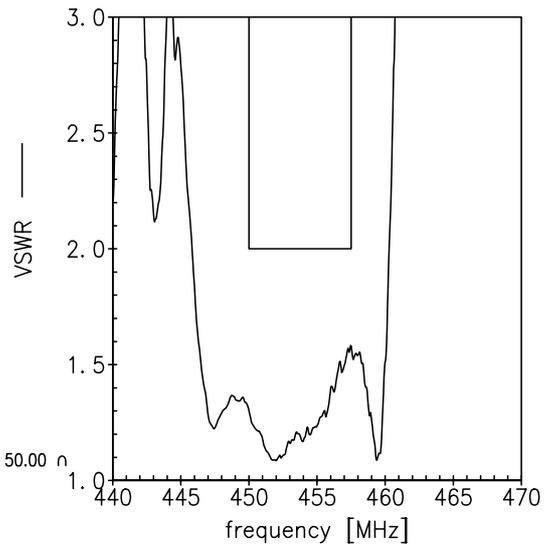
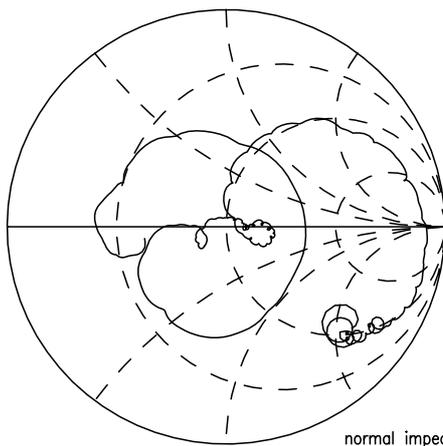
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Data sheet

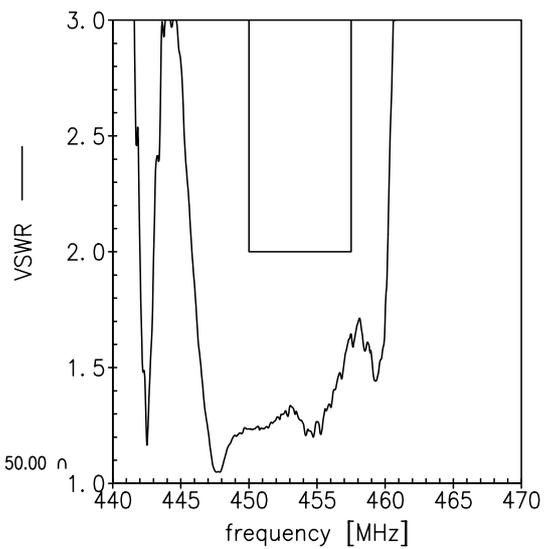
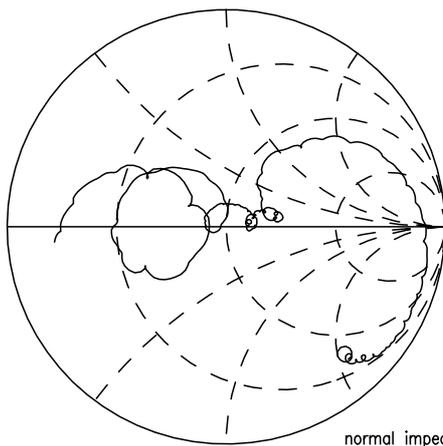


Smith charts

S₁₁ function



S₂₂ function



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**References**

Type	B5061
Ordering code	B39451B5061U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5061_NB.s2p, B5061_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 Inductor pdf-catalog http://www.tdk.co.jp/tefe02/coil.htm#aname1 and Data Library for circuit simulation http://www.tdk.co.jp/etvcl/index.htm

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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



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