SAW Components

SAW Tx filter

Cellular / WCDMA Band V

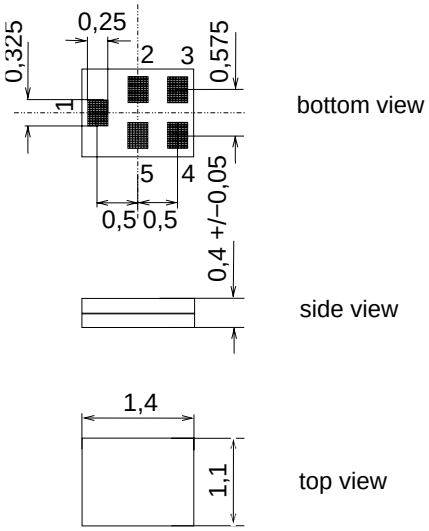
Series/type:	**B9425**
Ordering code:	**B39841B9425M410**
Date:	May 11, 2006
Version:	2.0

Application

- Low-loss RF filter for mobile telephone Cellular systems, transmit path (TX)
- Impedance 50 Ω input and output
- Unbalanced / unbalanced operation
- Very high RX suppression
- Usable passband 25 MHz

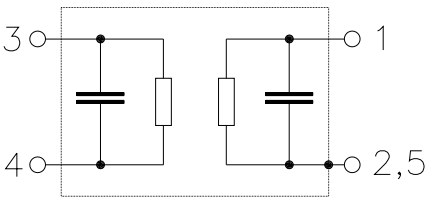
Features

- Package size 1.4 x1.1 x 0.4 mm³
- Package code QCS5I
- RoHS compatible
- Approximate weight 0.003 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)



Pin configuration

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



Characteristics

Temperature range for specification: T = –30 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	836.5	—	MHz
Maximum insertion attenuation	α_{max}				
824.0 ... 849.0 MHz		—	1.7	2.3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
824.0 ... 849.0 MHz		—	0.7	1.3	dB
Input VSWR					
824.0 ... 849.0 MHz		—	1.7	2.0	
Output VSWR					
824.0 ... 849.0 MHz		—	1.7	2.0	
Attenuation	α				
0.0 ... 779.0 MHz		45	47	—	dB
779.0 ... 804.0 MHz		40	44	—	dB
804.0 ... 814.0 MHz		12[1)]	19	—	dB
859.0 ... 869.0 MHz		7[2)]	14	—	dB
869.0 ... 894.0 MHz		40	42	—	dB
894.0 ... 1570.0 MHz		33	35	—	dB
1570.0 ... 2200.0 MHz		35	42	—	dB
2200.0 ... 6000.0 MHz		33	38	—	dB

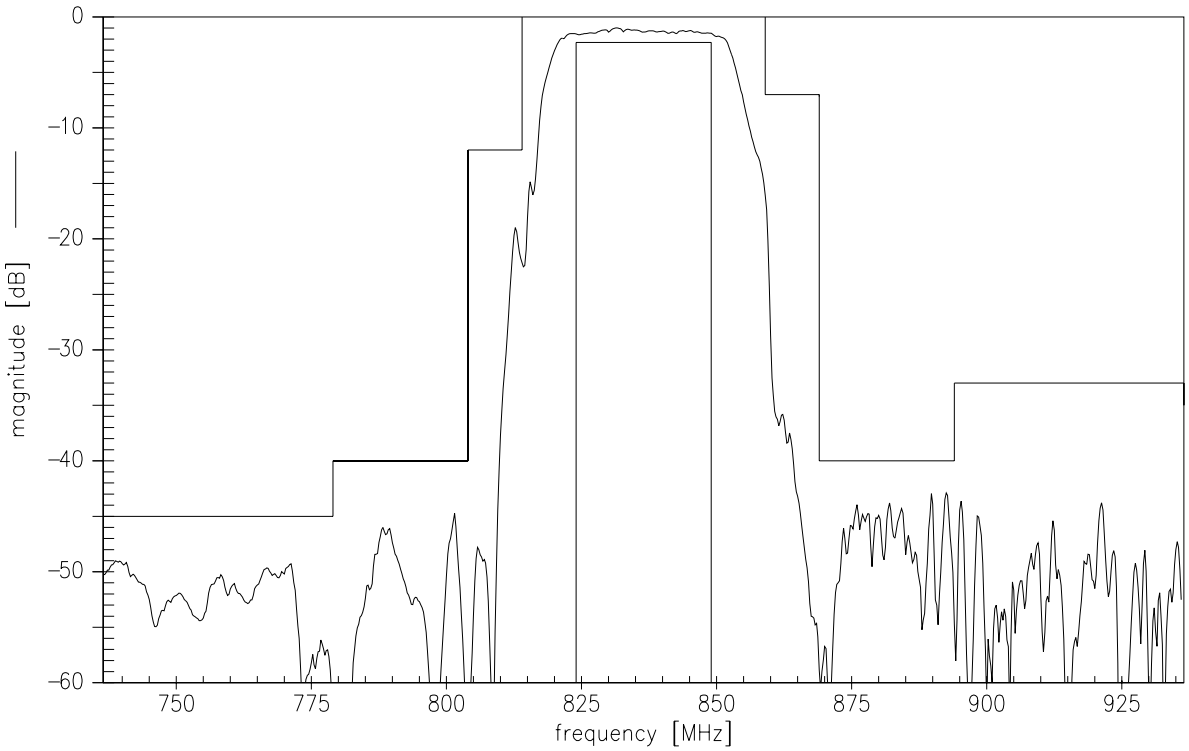
1) for –15 ˚C to 80 ˚C
2) for –15 ˚C to 80 ˚C

Maximum ratings

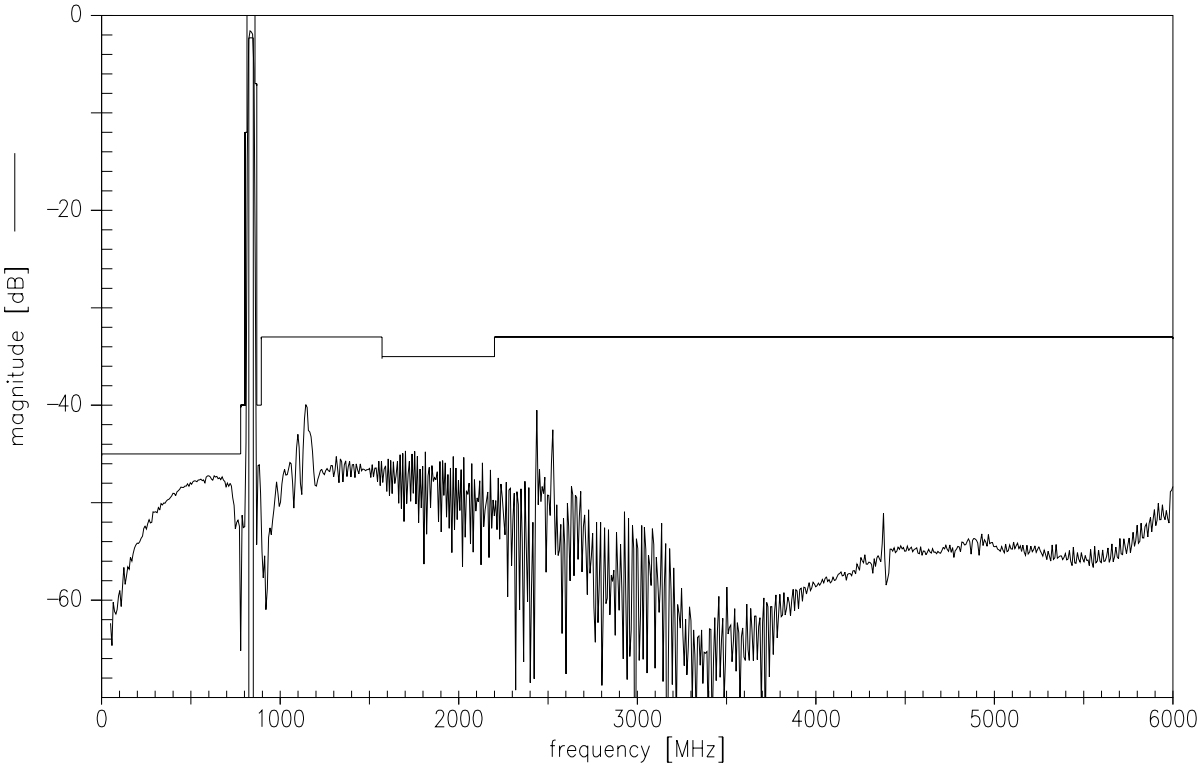
Operable temperature range	T	–40/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	100[1)]	V	Machine model, 10 pulses
Input Power				
824 - 849 MHz	P_{IN}	16	dBm	source impedance 50 Ω
elsewere	P_{IN}	10	dBm	source impedance 50 Ω

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

Transfer function

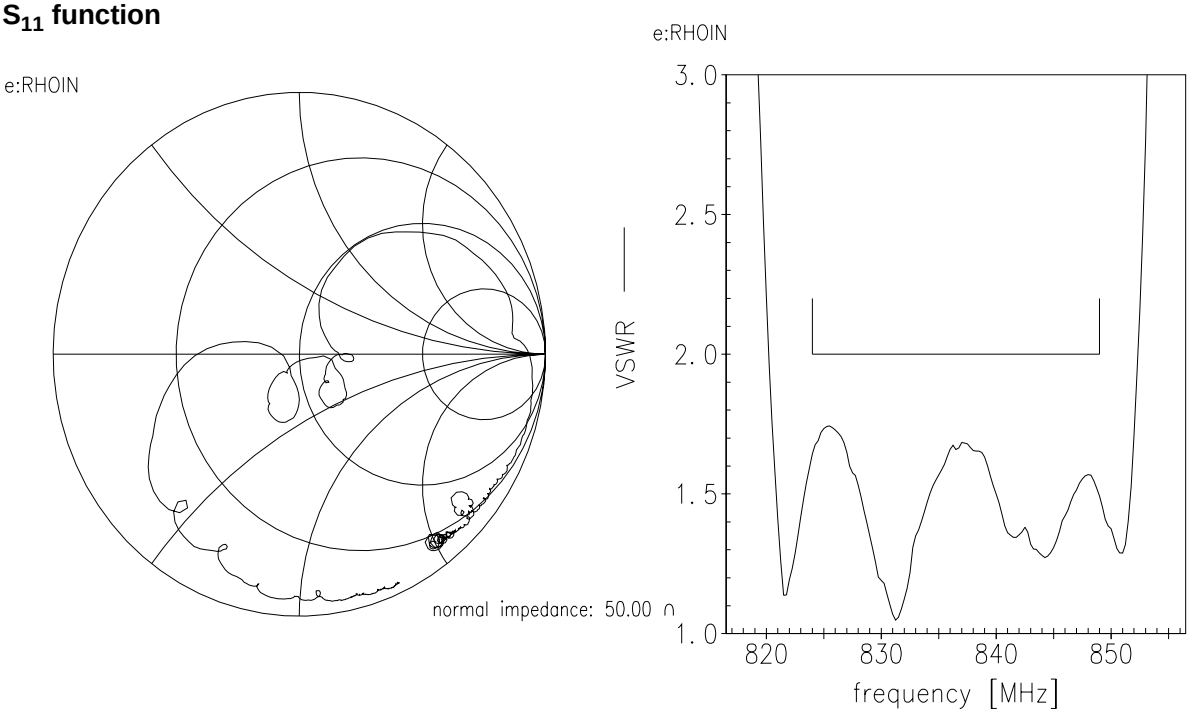


Transfer function (wideband)

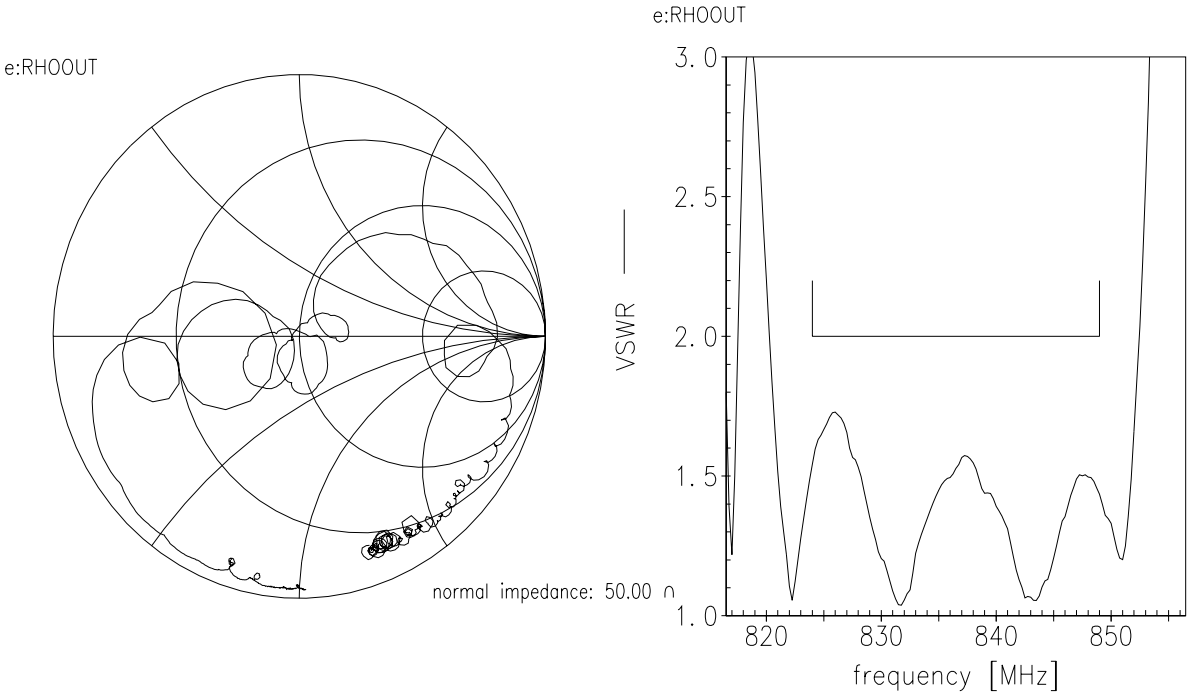


Smith charts

S_{11} function



S_{22} function



References

Type	B9425
Ordering code	B39841B9425M410
Marking and package	C61157-A8-A3
Packaging	F61074-V8212-Z000
Date codes	L_1126
S-parameters	B9425_NB.s2p B9425_WB.s2p
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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.

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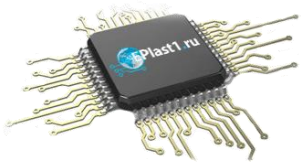

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