EPCOS

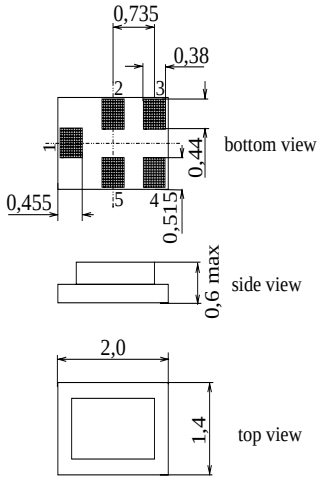
SAW Components

Data sheet B7873

Chip Sized Saw Package

Features

- Low-loss RF filter for WLAN
- Usable passband 100 MHz
- Unbalanced to unbalanced operation
- Package for **S**urface **M**ounted **T**echnology (**SMT**)



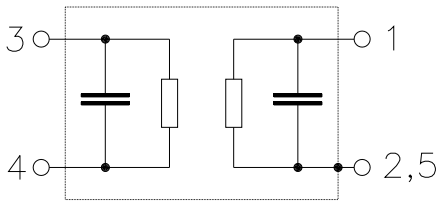
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,006g

Pin configuration

1	Input, unbalanced
4	Output, unbalanced
2,5	Case ground
3	to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7873	B39242-B7873-C713	C61157-A7-A130	F61074-V8151-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	– 40 /+ 85	˚C	
Storage temperature range	T_{stg}	– 40 /+ 85	˚C	
DC voltage	V_{DC}	3	V	
Input power max. 2400...2500 MHz	P_{IN}	6	dBm	source/load impedance 50Ω/50Ω

Characteristics

Operating temperature range: T = +25 °C
Terminating source impedance: Z_S = 50 Ω || 5,0 nH (parallel)
Terminating load impedance: Z_L = 50 Ω – 3,5 nH (serial)

		min.	typ.	max.	
Center frequency	f_c	—	2450,0	—	MHz
Maximum insertion attenuation	α_{max}				
2400,0 ... 2500,0 MHz		—	3,0	3,4	dB
Return loss					
2400,0 ... 2500,0 MHz		—	9,4	—	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400,0 ... 2500,0 MHz		—	1,0	1,5	dB
Attenuation	α				
100,0 ... 960,0 MHz		40	56	—	dB
960,0 ... 2150,0 MHz		32	35	—	dB
2150,0 ... 2170,0 MHz		30	40	—	dB
2170,0 ... 2250,0 MHz		20	33	—	dB
2250,0 ... 2300,0 MHz		10	29	—	dB
2550,0 ... 2650,0 MHz		10	27	—	dB
2650,0 ... 2800,0 MHz		20	27	—	dB
2800,0 ... 4000,0 MHz		25	36	—	dB
4000,0 ... 6000,0 MHz		30	45	—	dB

Characteristics

Operating temperature range: T = -40 to + 85 °C
Terminating source impedance: Z_S = 50 Ω ‖ 5,0 nH (parallel)
Terminating load impedance: Z_L = 50 Ω – 3,5 nH (serial)

		min.	typ.	max.	
Center frequency	f_c	—	2450,0	—	MHz
Maximum insertion attenuation	α_{max}				
2400,0 ... 2500,0 MHz		—	3,1	3,5	dB
Return loss					
2400,0 ... 2500,0 MHz		—	9,4	—	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400,0 ... 2500,0 MHz		—	1,0	1,5	dB
Attenuation	α				
100,0 ... 960,0 MHz		40	56	—	dB
960,0 ... 2150,0 MHz		32	35	—	dB
2150,0 ... 2170,0 MHz		30	40	—	dB
2170,0 ... 2250,0 MHz		20	33	—	dB
2250,0 ... 2300,0 MHz		10	29	—	dB
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4000,0 ... 6000,0 MHz		30	45	—	dB

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Terminating load impedance: Z_L = 60 Ω – 3,5 nH (serial)

		min.	typ.	max.	
Center frequency	f_c	—	2450,0	—	MHz
Maximum insertion attenuation	α_{max}				
2400,0 ... 2500,0 MHz		—	2,8	3,3	dB
Return loss					
2400,0 ... 2500,0 MHz		9,6	12,0	—	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400,0 ... 2500,0 MHz		—	1,0	1,5	dB
Attenuation	α				
100,0 ... 960,0 MHz		40	56	—	dB
960,0 ... 2150,0 MHz		32	35	—	dB
2150,0 ... 2170,0 MHz		30	40	—	dB
2170,0 ... 2250,0 MHz		20	33	—	dB
2250,0 ... 2300,0 MHz		10	29	—	dB
2550,0 ... 2650,0 MHz		10	27	—	dB
2650,0 ... 2800,0 MHz		20	27	—	dB
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Maximum insertion attenuation	α_{max}				
2400,0 ... 2500,0 MHz		—	3,1	3,5	dB
Return loss					
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Attenuation	α				
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960,0 ... 2150,0 MHz		32	35	—	dB
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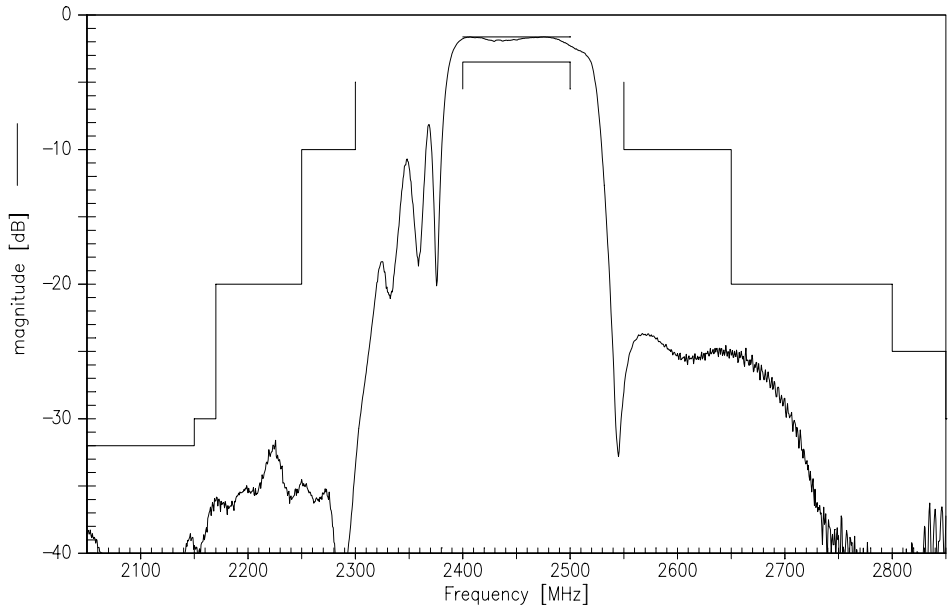
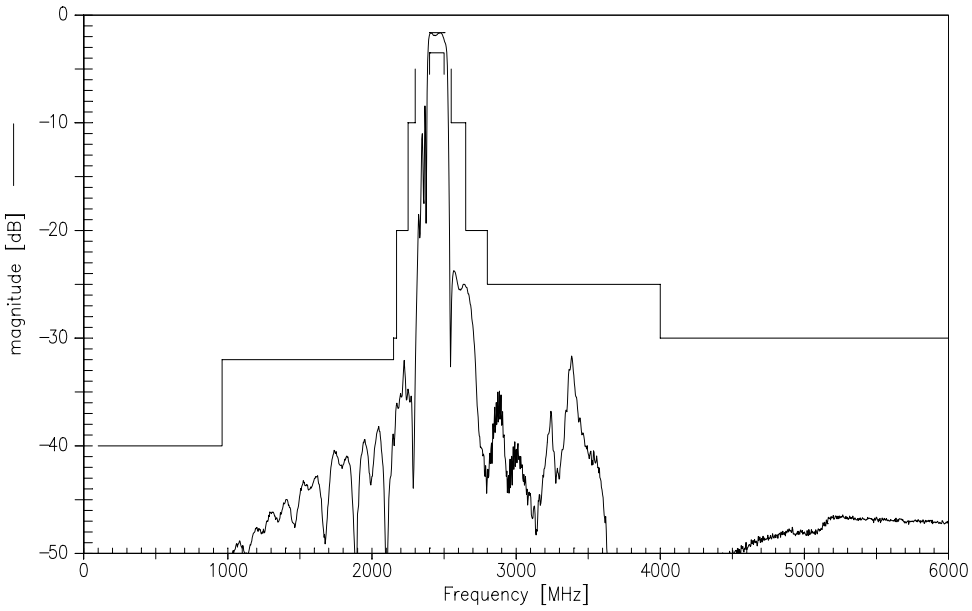
2550,0 ... 2650,0 MHz		10	27	—	dB
2650,0 ... 2800,0 MHz		20	27	—	dB
2800,0 ... 4000,0 MHz		25	36	—	dB
4000,0 ... 6000,0 MHz		30	45	—	dB

Transfer function





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