SAW Components

SAW RF filter

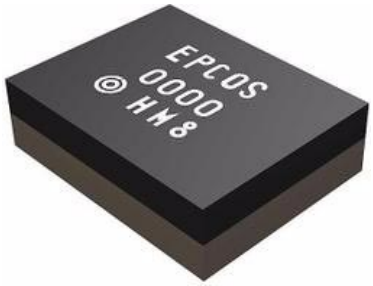
LTE Band 20

Series/type:	**B9485**
Ordering code:	**B39851B9485P810**
Date:	December 13, 2011
Version:	2.0

SMD

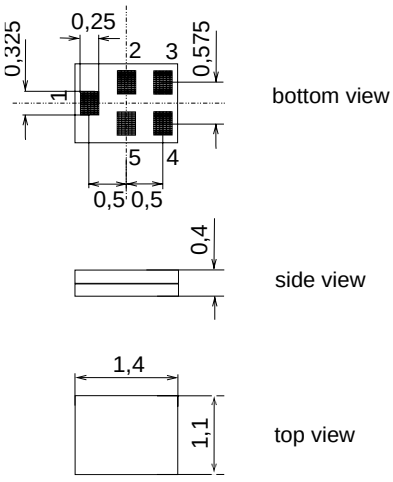
Application

- Low Loss RF filter for LTE band 20, TX path
- Usable band width 30 MHz
- Unbalanced to unbalanced operation (50 Ω/50 Ω)
- Very small size and low height



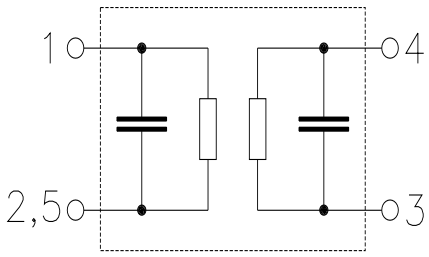
Features

- Package size 1.4 x 1.1 mm², package height 0.4 mm
- RoHS compatible
- Approx. weight 0.003 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)
- **M**oisture **S**ensitivity **L**evel **3**



Pin configuration

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



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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.	
Nominal frequency	f_N	—	847.0	—	MHz
Maximum insertion attenuation	α_{max}				
832.0 ... 862.0 MHz[1)]		—	1.5	2.0	dB
832.0 ... 862.0 MHz		—	1.5	2.2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
832.0 ... 862.0 MHz		—	0.8	1.5	dB
Input VSWR					
832.0 ... 862.0 MHz		—	1.9	2.2	
Output VSWR					
832.0 ... 862.0 MHz		—	1.9	2.2	
Absolute attenuation	α				
0.3 ... 791.0 MHz		30.0	37.0	—	dB
791.0 ... 821.0 MHz		35.0	39.0	—	dB
925.0 ... 960.0 MHz		20.0	31.0	—	dB
1565.42 ... 1606.0 MHz		35.0	45.0	—	dB
1664.0 ... 1724.0 MHz		25.0	45.0	—	dB
1805.0 ... 1880.0 MHz		25.0	45.0	—	dB
2110.0 ... 2170.0 MHz		25.0	40.0	—	dB
2400.0 ... 2496.0 MHz		35.0	40.0	—	dB
2496.0 ... 2586.0 MHz		35.0	40.0	—	dB
2586.0 ... 2620.0 MHz		35.0	40.0	—	dB
2620.0 ... 2690.0 MHz		25.0	40.0	—	dB
3328.0 ... 3448.0 MHz		20.0	50.0	—	dB

[1)] in -15 ˚C to 60 ˚C

Maximum ratings

Storage temperature range	T_{stg}	–40/+85	°C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	100[1)]	V	machine model, 1 pulse
Input power	P_{IN}	13	dBm	continous wave, 55°C , 50000h

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

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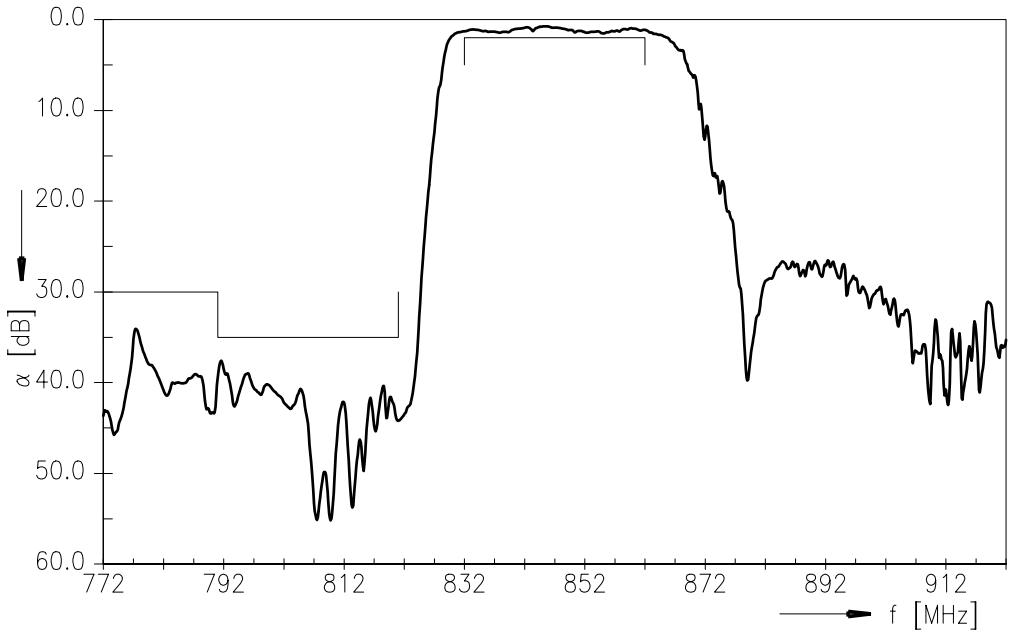
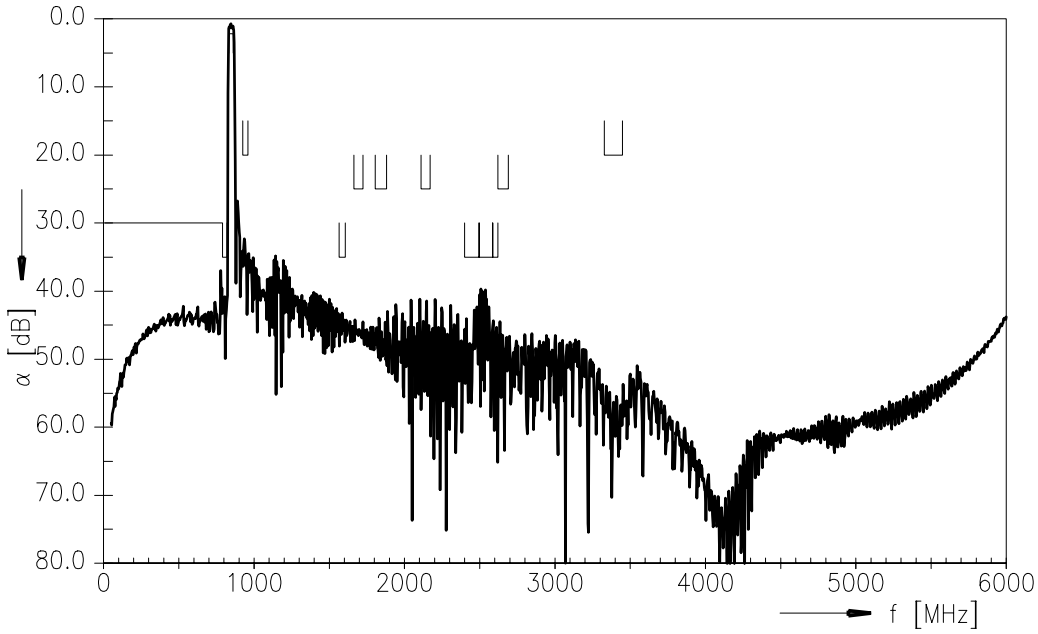
Transfer fonction (Narrow band)



Transfer fonction (Wide band)



References

Type	B9485
Ordering code	B39851B9485P810
Marking and package	C61157-A8-A3
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B9485_NB.S2P B9485_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.
Matching coilss	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

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