



SAW Components

SAW Diversity filter

LTE Band 17

Series/Type:	B9892
Ordering code:	B39741B9892P810
Date:	March 13, 2013
Version:	2.0



SAW Components

B9892

SAW Filter

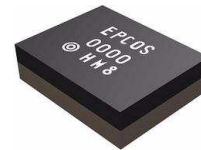
740.0 MHz

Data Sheet

SMD

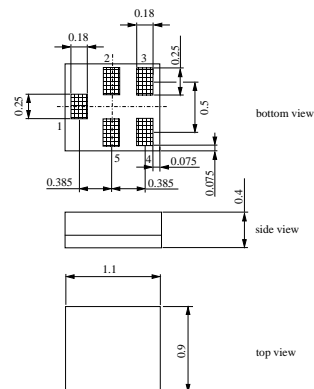
Application

- Low loss RF filter for LTE Band 17 system (Rx diversity)
- Usable band width 12 MHz
- Unbalanced to balanced operation (50 Ω /100 Ω)



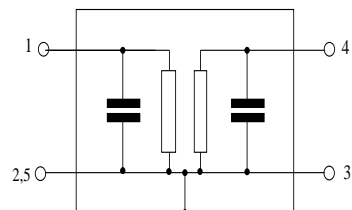
Features

- Package size 1.1 x 0.9 x 0.4 mm³
- RoHS compatible
- Approx. weight 0.001g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- **Moisture Sensitive Level 3**



Pin configuration

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



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



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Characteristics

Temperature range for specification: $T = -30\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ (unbalanced)
 Terminating load impedance: $Z_L = 100\ \Omega$ (balanced)

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	740.0	—	MHz
Maximum insertion attenuation 734.0 ... 746.0 MHz	α_{\max}	—	1.8	2.3	dB
Amplitude ripple (p-p) 734.0 ... 746.0 MHz	$\Delta\alpha$	—	0.8	1.3	dB
Input VSWR 734.0 ... 746.0 MHz		—	1.7	2.0	
Output VSWR 734.0 ... 746.0 MHz		—	1.7	2.0	
CMRR ($S_{21}-S_{31} / S_{21}+S_{31}$) 734.0 ... 746.0 MHz		—	40	25	dB
Absolute attenuation	α				
30.0 ... 686.0 MHz		50	68	—	dB
704.0 ... 716.0 MHz		46	51	—	dB
716.0 ... 722.0 MHz		40	48	—	dB
722.0 ... 725.0 MHz		30	47	—	dB
725.0 ... 728.0 MHz		10	31	—	dB
777.0 ... 793.0 MHz		33	38	—	dB
793.0 ... 1438.0 MHz		40	51	—	dB
1438.0 ... 1462.0 MHz		40	65	—	dB
1468.0 ... 1492.0 MHz		40	65	—	dB
1570.0 ... 1610.0 MHz		50	65	—	dB
2124.0 ... 2178.0 MHz		40	65	—	dB
2202.0 ... 2238.0 MHz		40	55	—	dB
2400.0 ... 2484.0 MHz		50	65	—	dB
2496.0 ... 2690.0 MHz		40	65	—	dB
2936.0 ... 2984.0 MHz		40	65	—	dB
3400.0 ... 3800.0 MHz		40	65	—	dB
4404.0 ... 4476.0 MHz		40	60	—	dB
4900.0 ... 5850.0 MHz		40	58	—	dB
5872.0 ... 5968.0 MHz		40	50	—	dB

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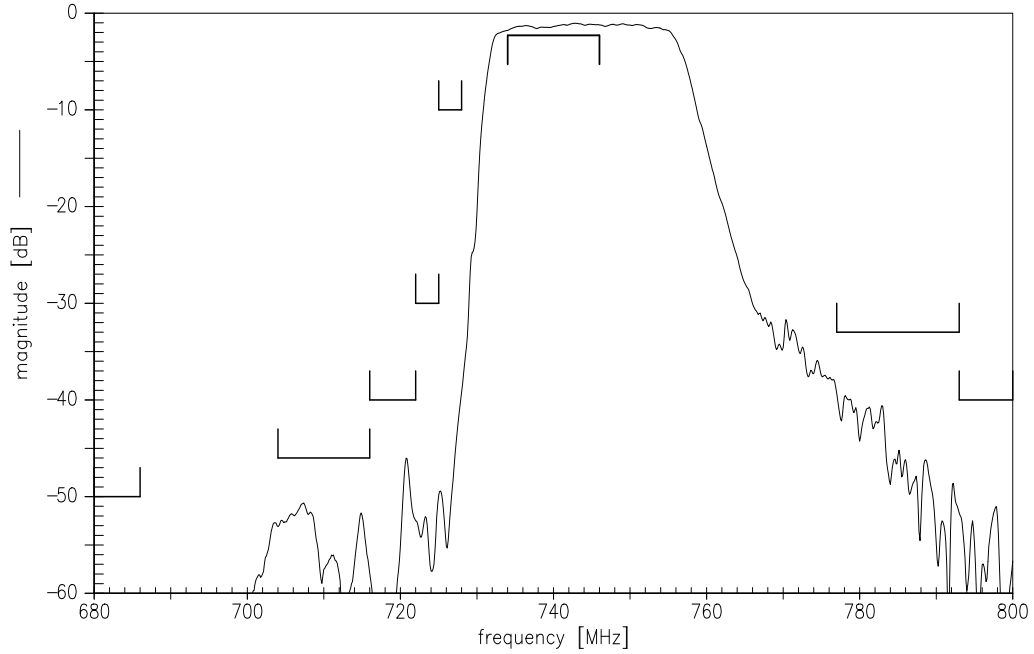
Maximum ratings

Storage temperature range	T_{stg}	-40/+85	°C	M model, 1 pulse
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	100 ¹⁾	V	
Input power 704.0 ... 716.0 MHz	P_{in}	15	dBm	T=85°C, 50 000 h

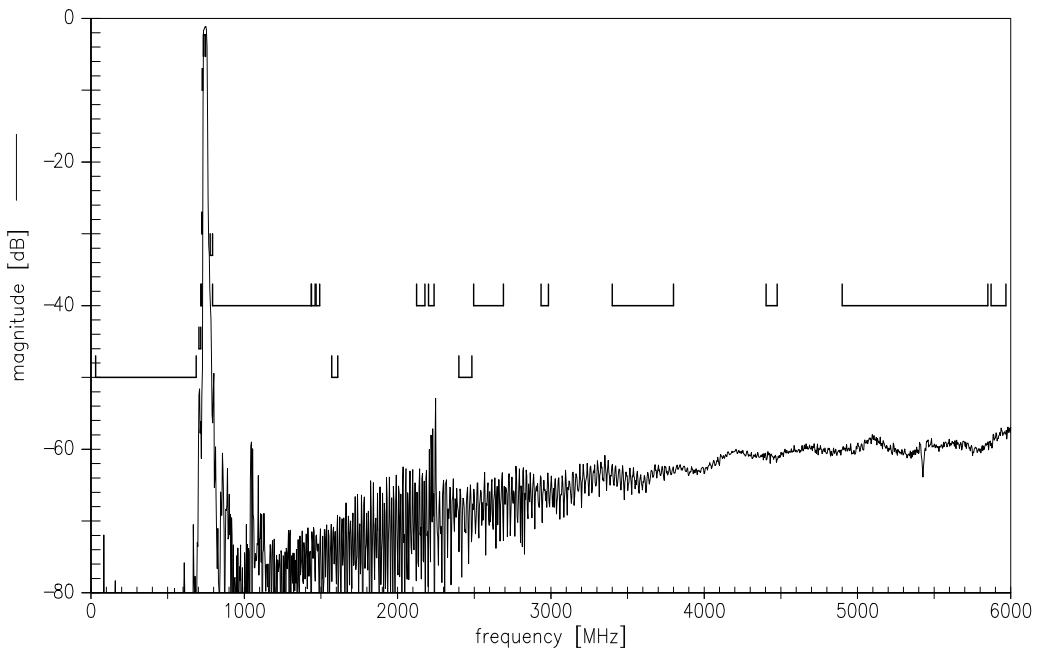
¹⁾ acc. to JESD22-A115A (Machine model), 1 negative & 1 positive pulses.



Transfer function (narrow band)



Transfer function (wide band)





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References

Type	B9892
Ordering code	B39741B9892P810
Marking and package	C61157-A8-A56
Packaging	F61074-V8255-Z000
Date codes	L_1126
S-parameters	B9892_NB.s3p, B9892_WB.s3p see file header for port/in assignment table
Soldering profile	S_6001
RoHS compatible	RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8 th , 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive") with due regard to the application of exemptions as per Annex III of the Directive in certain cases.
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

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