



RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW RF filter

Diversity RX Band 13 & 17

Series/type:	B8321
Ordering code:	B39751B8321P810
Date:	August 27, 2013
Version:	2.0

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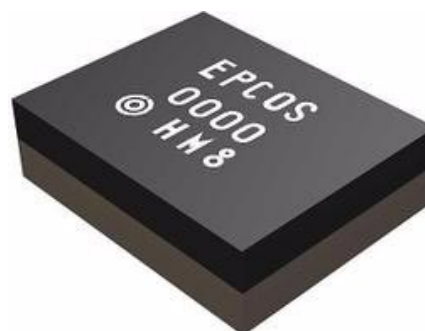
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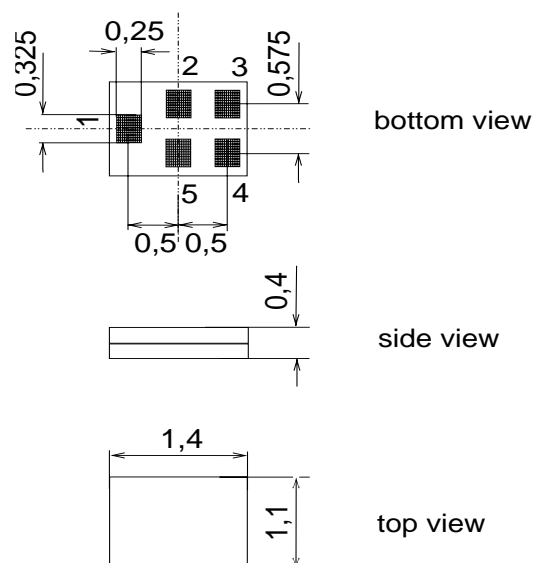
EPCOS AG is a TDK Group Company.

Application

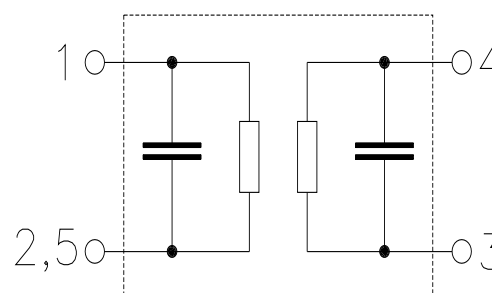
- Low Loss RF filter for band 13&17, DRX path
- Usable band width 22 MHz
- Unbalanced to balanced operation (50 Ω/100 Ω)
- Very small size and low height


Features

- Package size 1.4 x 1.1 mm²
- Max. Package height 0.45 mm
- Tolerance of Package dimensions +/-0.1mm
- RoHS compatible
- Approx. weight 0.003 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- **Moisture Sensitivity Level 3**


Pin configuration

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



Data Sheet

Characteristics

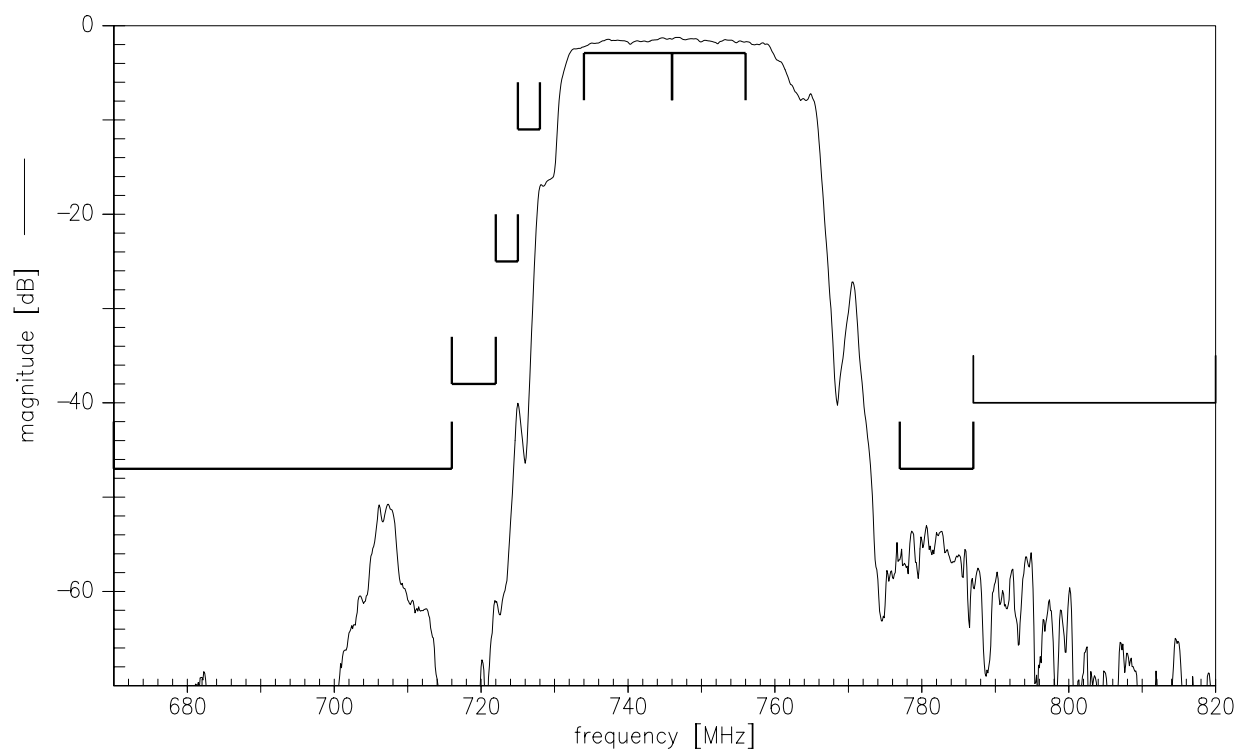
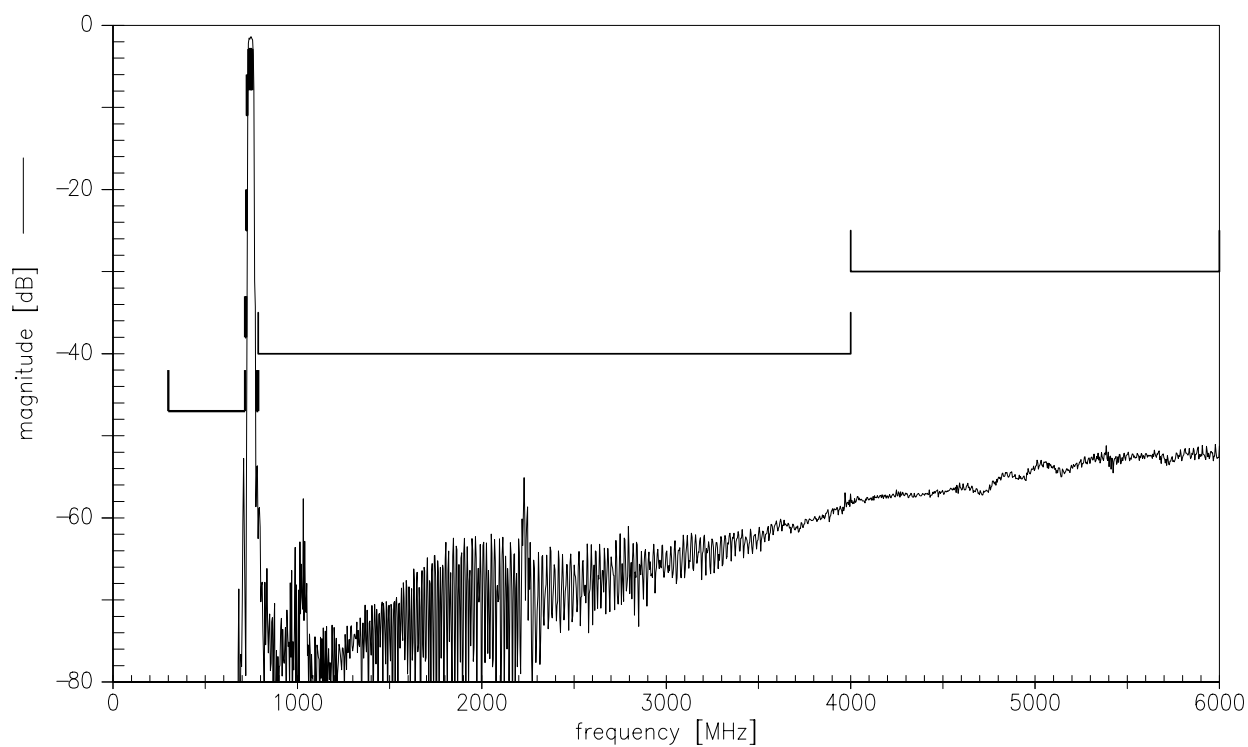
Temperature range for specification: $T = -20\text{ }^{\circ}\text{C}$ to $85\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 100\ \Omega$ (balanced)

		B8321			
		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	745.0	—	MHz
Maximum insertion attenuation	α_{\max}				
734.0 ... 746.0 MHz		—	2.2	2.9	dB
746.0 ... 756.0 MHz		—	2.0	2.9	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
734.0 ... 746.0 MHz		—	0.7	1.7	dB
746.0 ... 756.0 MHz		—	0.8	1.7	dB
Input VSWR					
734.0 ... 756.0 MHz		—	1.8	2.1	
Output VSWR					
734.0 ... 756.0 MHz		—	1.8	2.1	
Common mode rejection ratio					
734.0 ... 756.0 MHz		—	33	27	dB
Attenuation	α				
10.0 ... 704.0 MHz		47	80	—	dB
704.0 ... 716.0 MHz		47	55	—	dB
716.0 ... 722.0 MHz		38	60	—	dB
722.0 ... 725.0 MHz		25	40	—	dB
725.0 ... 728.0 MHz		11	18	—	dB
777.0 ... 787.0 MHz		47	52	—	dB
787.0 ... 4000.0 MHz		40	55	—	dB
4000.0 ... 6000.0 MHz		30	52	—	dB
Attenuation	α_{meam}				
722.0 ... 728.0 MHz		20	30	—	dB


Maximum ratings

Operating temperature range	T_{stg}	-30/+85	°C	
Storage temperature range	T_{stg}	-40/+125	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	100 ¹⁾	V	machine model, 1 pulse
Input power	P_{IN}	15	dBm	continuous wave, 55°C , 50000h

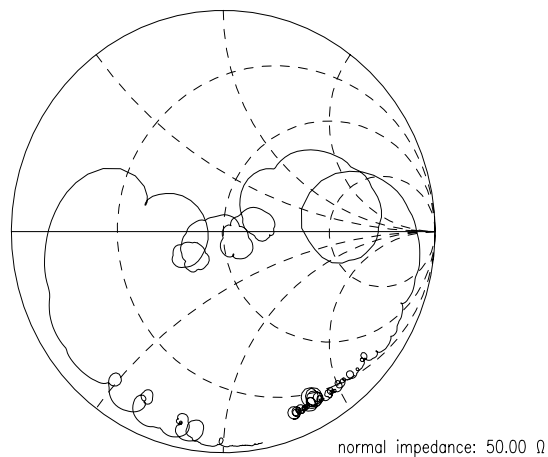
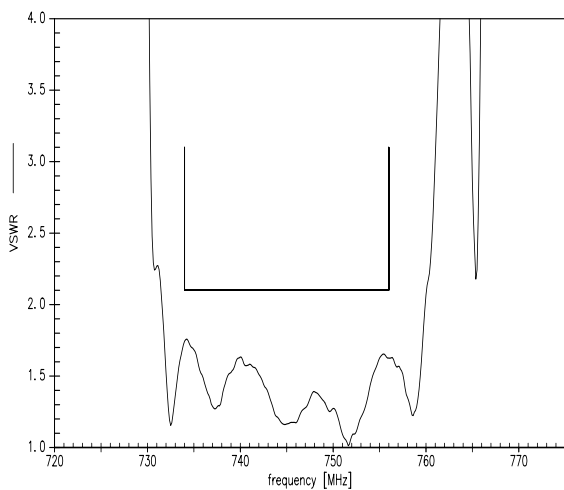
¹⁾ acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulses.


Transfer function (narrow band)

Transfer function (wide band)


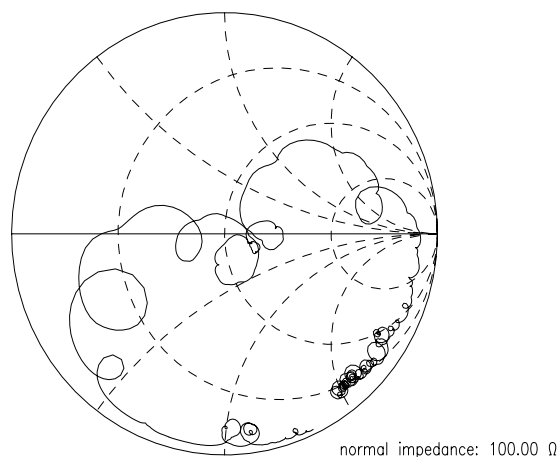
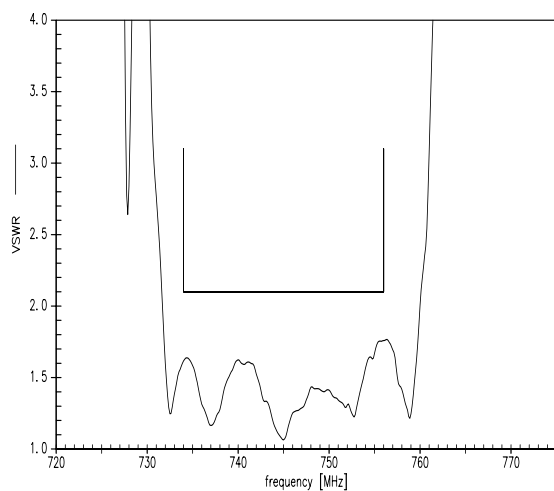
Data Sheet



S11 VSWR



S22 VSWR




References

Type	B8321
Ordering code	B39751B8321P810
Marking and package	C61157-A8-A3
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B8321_NB.s3p, B8321_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.
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.
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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