

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW Filter

TD-SCDMA 1900

Series/type:	B9483
Ordering code:	B39192B9483P810
Date:	October 13, 2016
Version:	2.1

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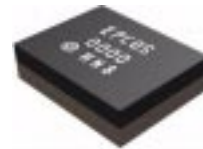
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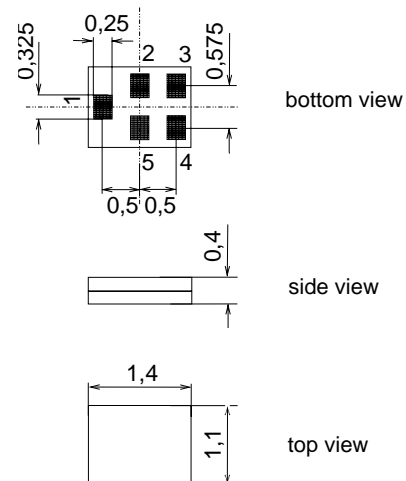
Data sheet


Application

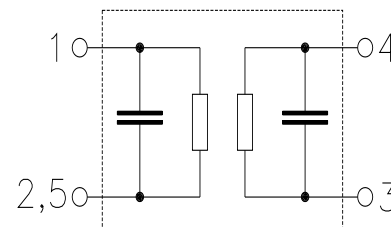
- Low-loss RF filter for mobile telephone TD-SCDMA systems.
- Unbalanced to balanced operation
- Low amplitude ripple
- Usable passband 40MHz
- Impedance 50 Ω at input and 100 Ω balanced output
- No matching network


Features

- Package size 1.4 x 1.1 x 0.4 mm³
- RoHS compatible
- Approx. weight 0.003 g
- 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



Data sheet


Characteristics

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

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	1900.0	—	MHz
Maximum insertion attenuation	α_{\max}	—	1.8	2.1	dB
1880.0 ... 1920.0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.6	1.0	dB
1880.0 ... 1920.0 MHz					
Input VSWR		—	1.8	2.1	
1880.0 ... 1920.0 MHz					
Output VSWR		—	1.8	2.1	
1880.0 ... 1920.0 MHz					
Common mode rejection ratio		20	23	—	dB
1880.0 ... 1920.0 MHz					
Attenuation	α	30	40	—	dB
0.1 ... 1795.0 MHz					
1795.0 ... 1820.0 MHz		25	32	—	
1820.0 ... 1850.0 MHz		20	23	—	
1950.0 ... 1980.0 MHz		17	20	—	
1980.0 ... 2025.0 MHz		15	25	—	
2025.0 ... 6000.0 MHz		25	31	—	


Maximum ratings

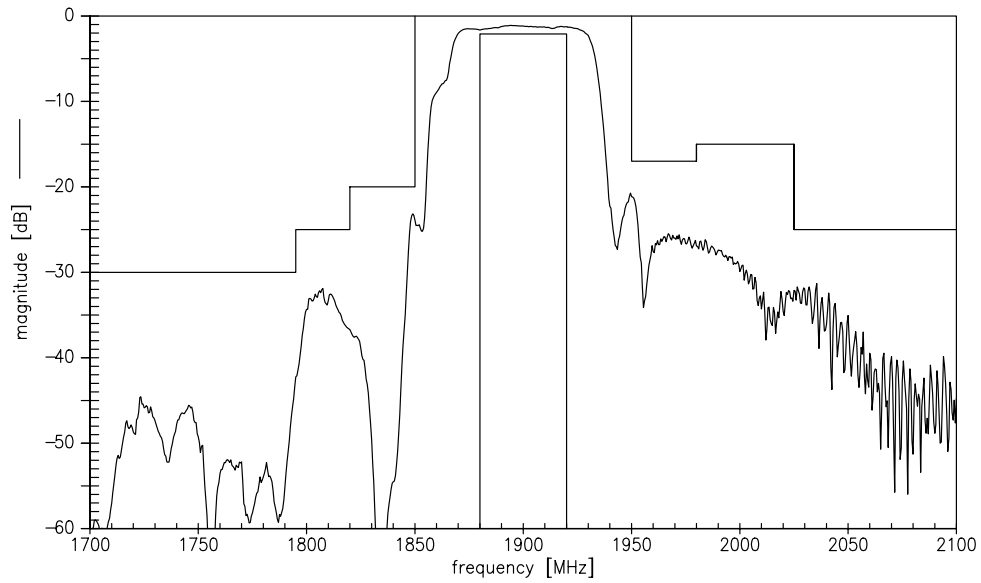
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	3	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input Power at 1880.0...1920.0MHz	P _{IN}	12	dBm	continuous wave

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

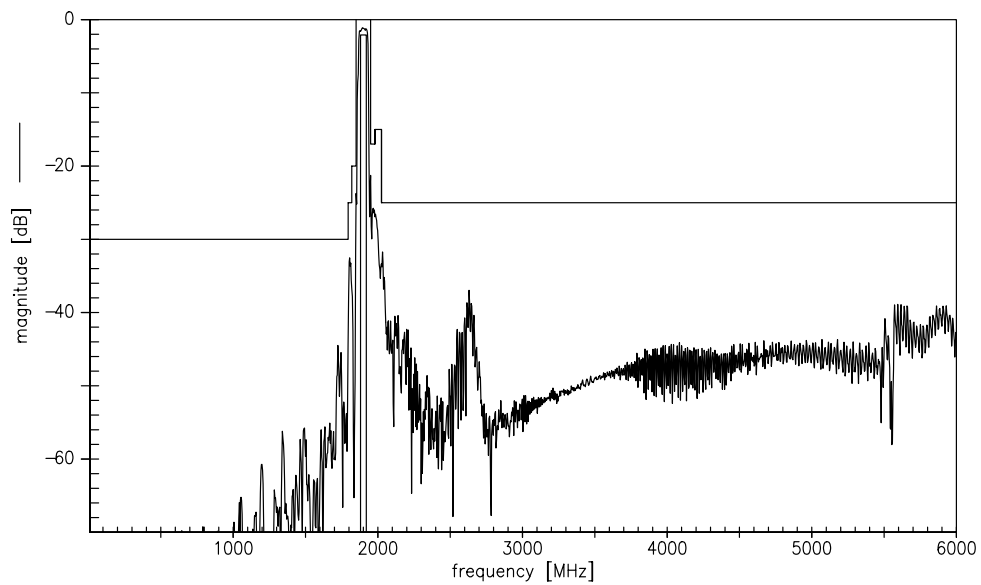
Data sheet



Transfer function (narrowband)



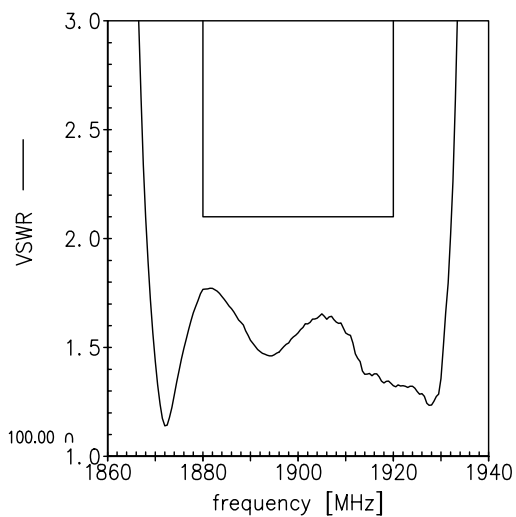
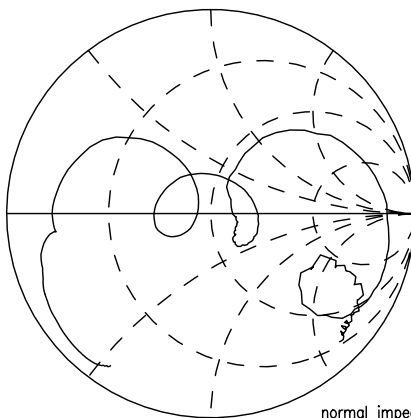
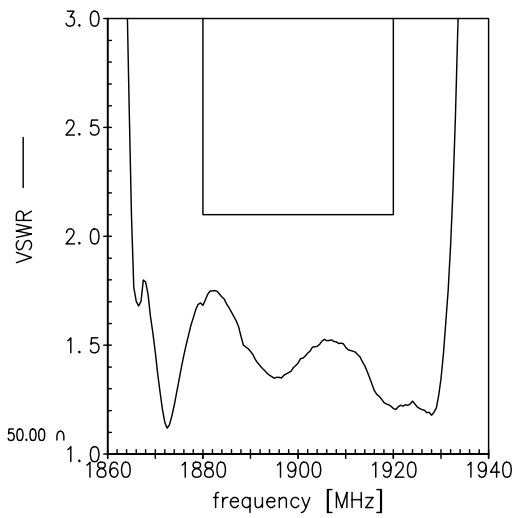
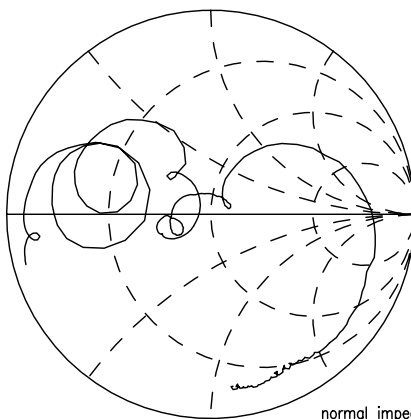
Transfer function (wideband)



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



S₁₁ function




References

Type	B9483
Ordering code	B39192B9483P810
Marking and package	C61157-A8-A14-4-27
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B9483_NB_UN.s3p, B9483_WB_UN.s3p see file header for port/pin 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 a large variety of matching coils.

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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