Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

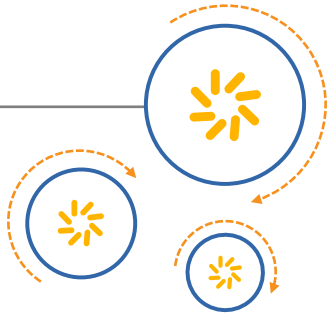
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture



SAW Components

SAW Duplexer

Cellular / LTE Band 11

Series/type:	B8632
Ordering code:	B39142B8632P810
Date:	July 17, 2014
Version:	2.2

RF360 products mentioned within this document are offered by RF360 Europe GmbH and other subsidiaries of RF360 Holdings Singapore Pte. Ltd. (collectively, the “RF360 Subsidiaries”). RF360 Holdings Singapore Pte. Ltd. is a joint venture of Qualcomm Global Trading Pte. Ltd. and EPCOS AG. References in this documentation to EPCOS AG should properly reference, and shall be read to reference, the RF360 Subsidiaries.

RF360 Europe GmbH, Anzinger Str. 13, München, Germany

SAW Components

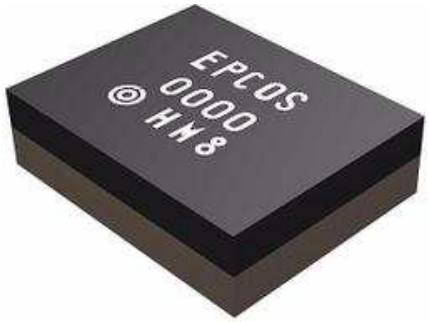
SAW Duplexer

Cellular / LTE Band 11

Series/type:	**B8632**
Ordering code:	**B39142B8632P810**
Date:	July 17, 2014
Version:	2.2

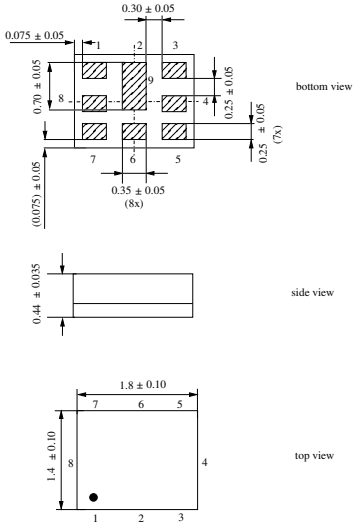
Application

- Multimode SAW duplexer for mobile telephone Cellular / LTE Band 11 systems
- Low insertion attenuation
- Low amplitude ripple



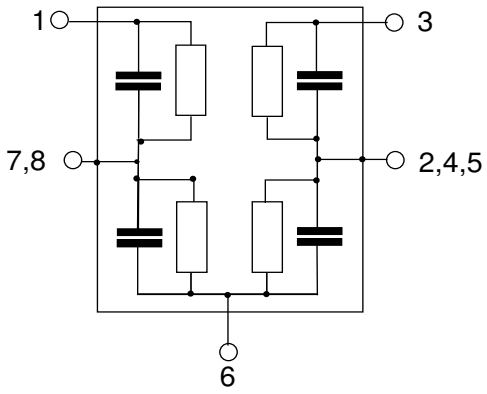
Features

- Package size 1.8 x 1.4 mm³
- Max. package height 0.475 mm
- RoHS compatible
- Approx. weight 0.0042g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, Au-plated terminals
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)
- **M**oisture **S**ensitivity **L**evel **3**



Pin configuration

■	3	TX Input
■	1	RX Output
■	6	Antenna
■	2, 4, 5, 7,8	To be grounded



Data sheet SMD

Characteristics

Temperature range for specification: T = –30 ˚C to + 90 ˚C
Antenna terminating impedance: Z_{ANT}= 50 Ω ll 6.2 nH
RX terminating impedance: Z_{RX} = 50 Ω
TX terminating impedance: Z_{TX} = 50 Ω

Characterisitcs TX - ANT			min.	typ. @ 25 ˚C	max.	
Center frequency	f_C		—	1437.9	—	MHz
Maximum insertion attenuation	α_{max}					
1427.9 ... 1447.9	MHz		—	1.4	1.9	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
1427.9 ... 1447.9	MHz		—	0.3	1.0	dB
Input VSWR (TX port)						
1427.9 ... 1447.9	MHz		—	1.5	2.0	
Output VSWR (ANT port)						
1427.9 ... 1447.9	MHz		—	1.4	2.0	
Attenuation	α					
10.0 ... 1390.0	MHz		29	32	—	dB
1390.0 ... 1409.0	MHz		5	9	—	dB
1475.9 ... 1495.9	MHz		45	54	—	dB
1559.0 ... 1563.0	MHz		40	47	—	dB
1565.420 ... 1573.374	MHz		35	47	—	dB
1573.374 ... 1577.466	MHz		40	47	—	dB
1577.466 ... 1585.420	MHz		35	47	—	dB
1597.5515 ... 1605.887	MHz		40	48	—	dB
1607.0 ... 1680.0	MHz		25	48	—	dB
1844.9 ... 1879.9	MHz		30	43	—	dB
1884.5 ... 1919.6	MHz		15	42	—	dB
2010.0 ... 2025.0	MHz		30	42	—	dB
2110.0 ... 2170.0	MHz		30	39	—	dB
2400.0 ... 2483.5	MHz		29	34	—	dB
2855.8 ... 2905.8	MHz		25	29	—	dB
4283.7 ... 4358.7	MHz		18	23	—	dB
4900.0 ... 5850.0	MHz		15	22	—	dB

Characteristics

Temperature range for specification: T = –30 ˚C to +90 ˚C
Antenna terminating impedance: Z_{ANT}= 50 Ω ll 6.2 nH
RX terminating impedance: Z_{RX} = 50 Ω
TX terminating impedance: Z_{TX} = 50 Ω

Characterisitcs ANT - RX			min.	typ. @ 25 ˚C	max.	
Center frequency	f_C		—	1485.9	—	MHz
Maximum insertion attenuation	α_{max}					
1475.9 ... 1495.9	MHz		—	1.7	2.3[1)]	dB
1475.9 ... 1495.9	MHz		—	1.7	2.4	dB
Amplitude ripple(p-p)	$\Delta\alpha$					
1475.9 ... 1495.9	MHz		—	0.7	1.1	dB
Input VSWR (ANT port)						
1475.9 ... 1495.9	MHz		—	1.5	2.0	
Output VSWR (RX port)						
1475.9 ... 1495.9	MHz		—	1.5	2.0	
Attenuation	α					
10.0 ... 1427.9	MHz		40	48	—	dB
48.0	MHz		60	97	—	dB
814.0 ... 849.0	MHz		40	49	—	dB
1427.9 ... 1447.9	MHz		45	51	—	dB
1452.0 ... 1460.0	MHz		5	11	—	dB
1581.0 ... 6000.0	MHz		25	30	—	dB
2400.0 ... 2500.0	MHz		40	46	—	dB
4427.7 ... 4487.7	MHz		34	42	—	dB
4900.0 ... 5950.0	MHz		25	29	—	dB
IMD product level limits[2)]						
at f_{TX}=1437.9MHz, f_{RX}=1485.9MHz						
Blocker 1 48.0	MHz		—	-135	-109	dBm
Blocker 3 1389.9	MHz		—	-99	-86	dBm
Blocker 3 2923.8	MHz		—	-109	-95	dBm
Blocker 4 4361.7	MHz		—	-111	-91	dBm

1) For temperature range -30 ˚C to +85 ˚C
2) IMD product level limits for power levels P_{TX}=21.5 dBm (antenna port output power) and $P_{Blocker}$=-15dBm (antenna port input power).

Characteristics

Temperature range for specification: T = –30 ˚C to +90 ˚C
Antenna terminating impedance: Z_{ANT}= 50 Ω ll 6.2 nH
RX terminating impedance: Z_{RX} = 50 Ω
TX terminating impedance: Z_{TX} = 50 Ω

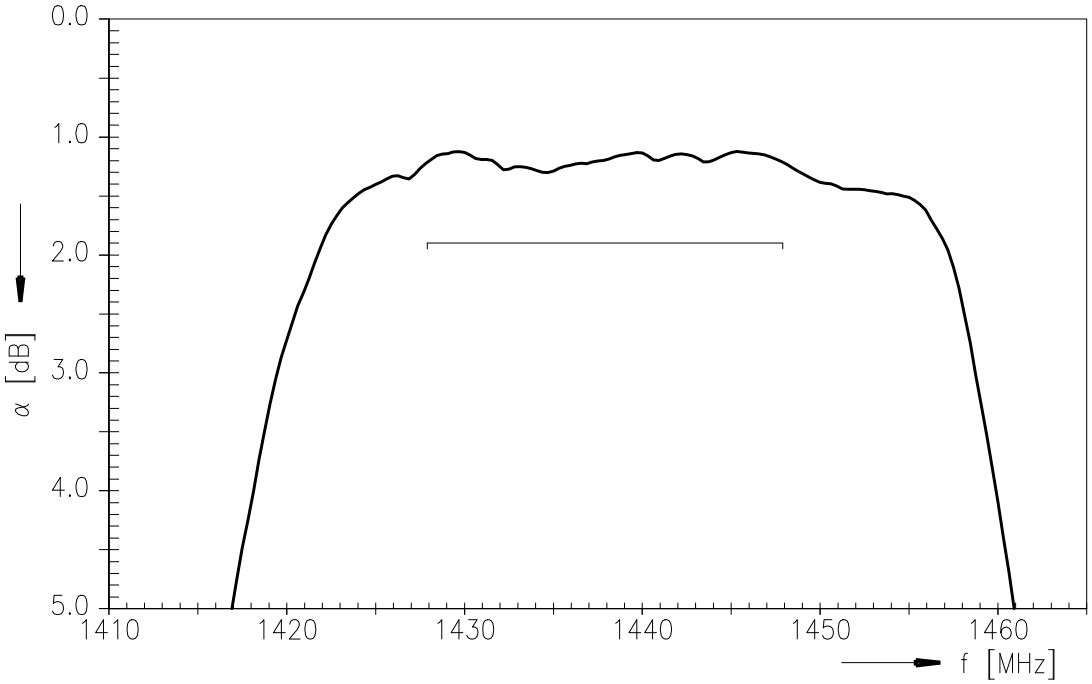
Characterisitcs TX - RX		min.	typ. @ 25 ˚C	max.	
Isolation	α				
1427.9 ... 1447.9	MHz	55	60	—	dB
1475.9 ... 1495.9	MHz	50	57	—	dB
1574.0 ... 1577.0	MHz	30	61	—	dB
2855.8 ... 2905.8	MHz	30	50	—	dB
4283.7 ... 4358.7	MHz	25	45	—	dB

Maximum ratings

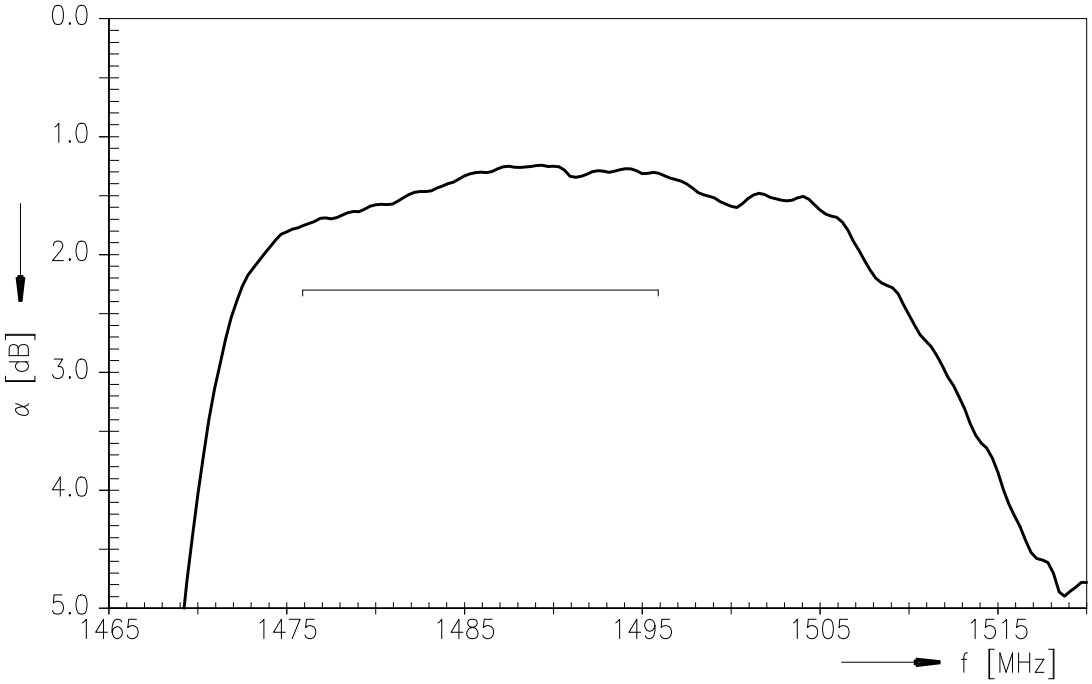
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5[1]	V	
ESD voltage	V_{ESD}	50[2]	V	Machine Model
		150[3]	V	Human Body Model
		600[4]	V	Charged Device Model
Input power	P_{IN}			source and load impedance 50 Ω
1427.9 ... 1447.9 MHz		29	dBm	} continuous wave
elsewhere		10	dBm	} T = 50˚C, 5000 h

1) 168h Damp Heat Steady State acc. to IEC60068-2-67 Cy
2) acc. to JESD22-A115B (MM - Machine Model), 10 negative & 10 positive pulses.
3) acc. to JESD22-A114F (HBM - Human Body Model), 1 negative & 1 positive pulses.
4) acc. to JESD22-C101C (CDM - Filed Induced Charged Device Model), 3 negative & 3 positive pulses.

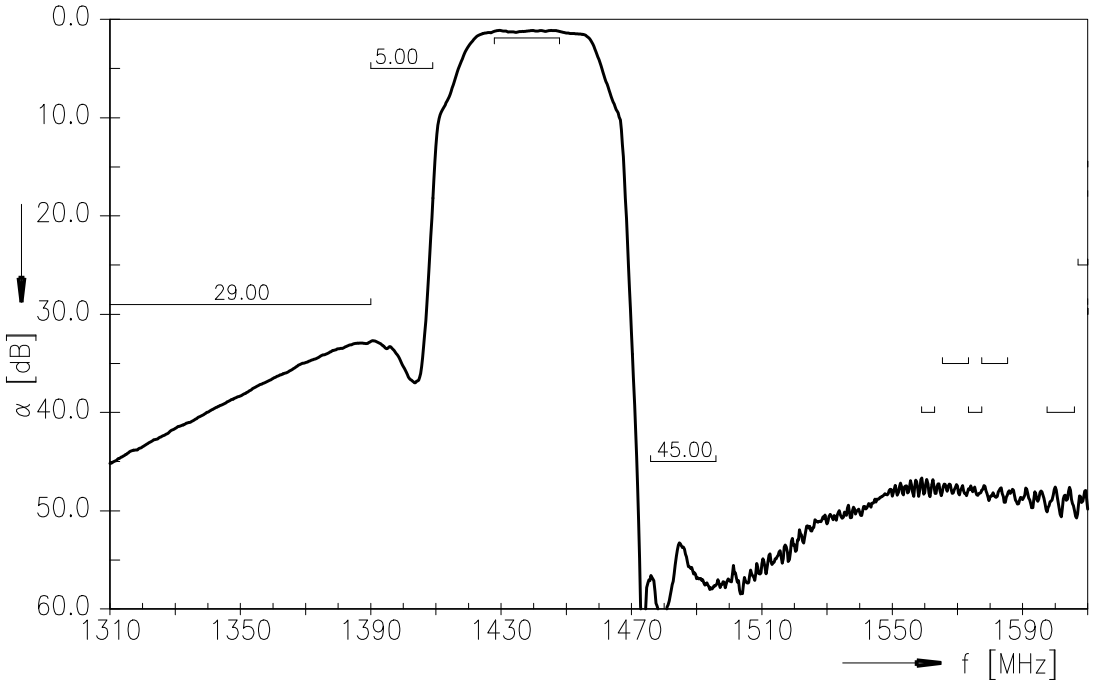
Frequency Response Tx-Ant



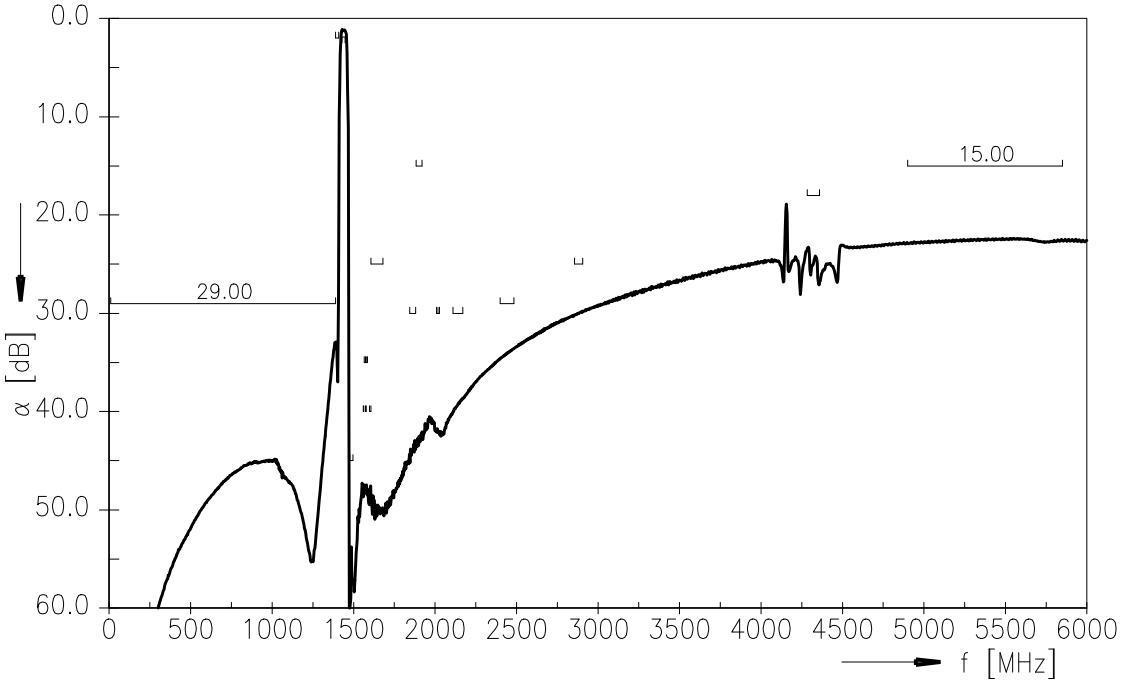
Frequency Response Ant-Rx



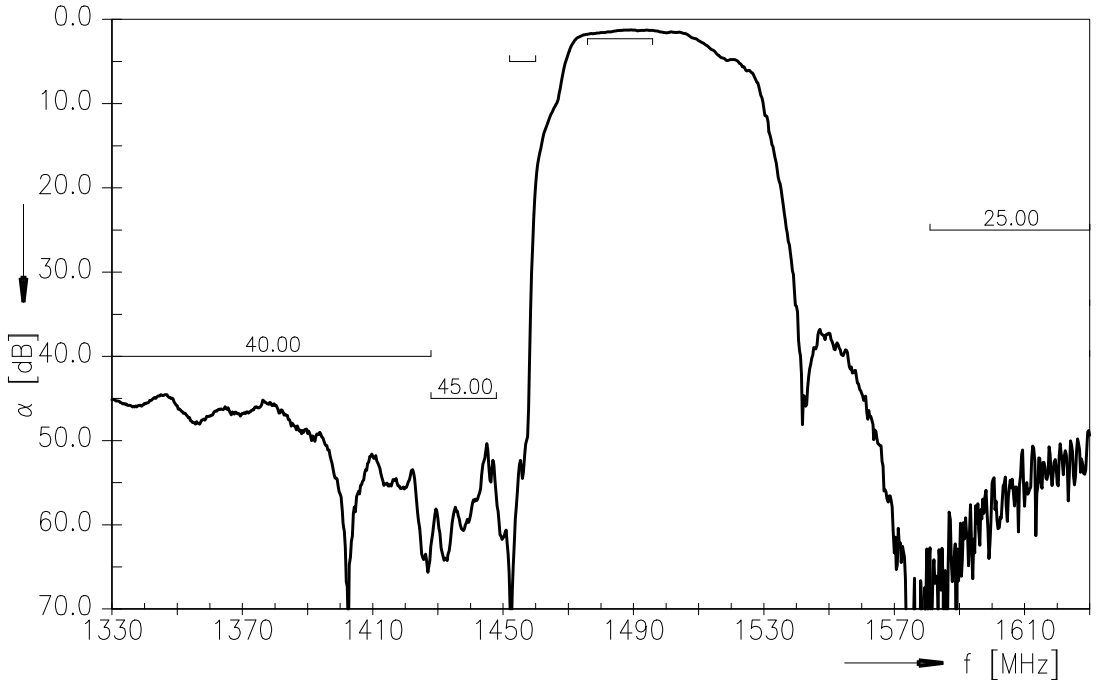
Frequency Response Tx-Ant



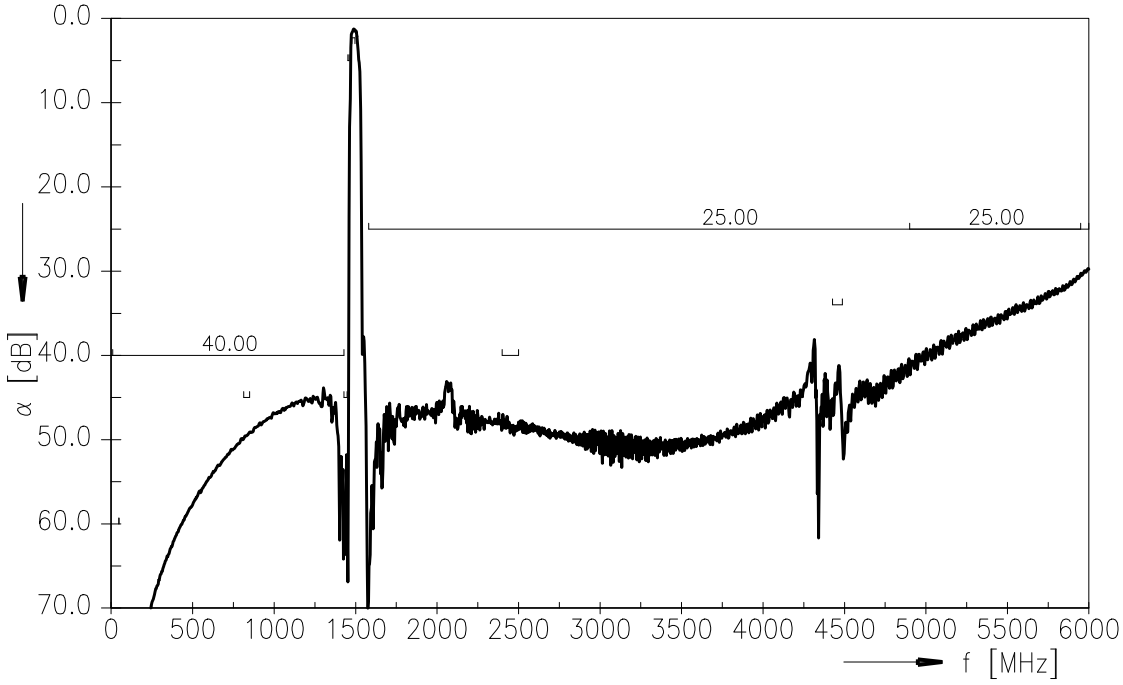
Frequency Response Tx-Ant (wideband)



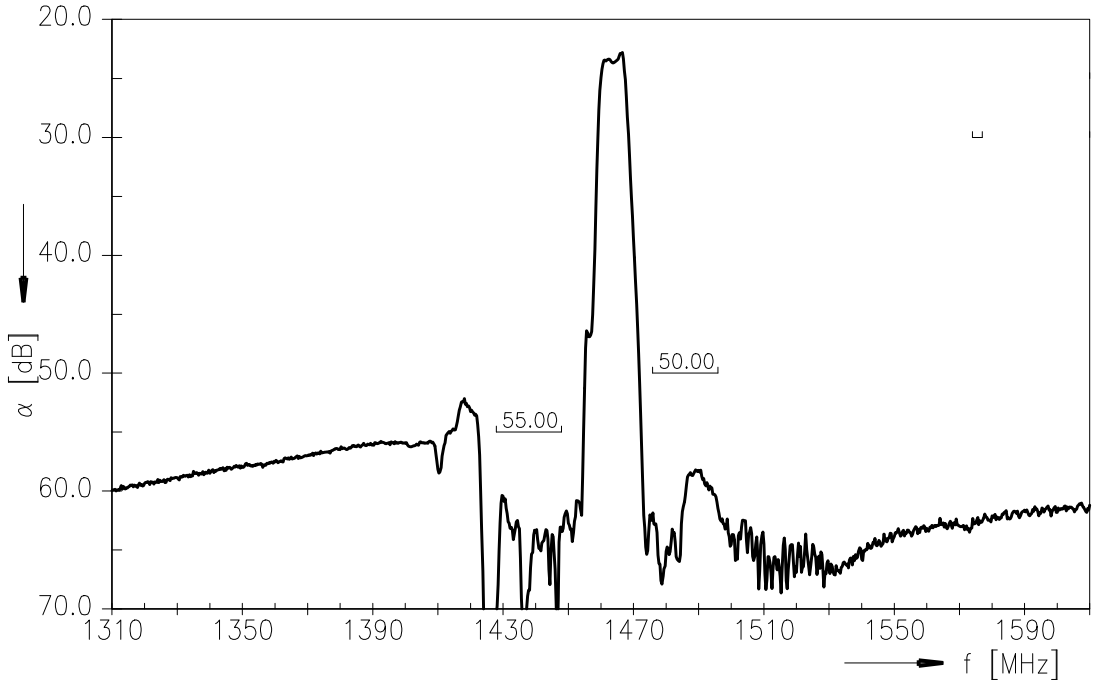
Frequency Response Rx-Ant



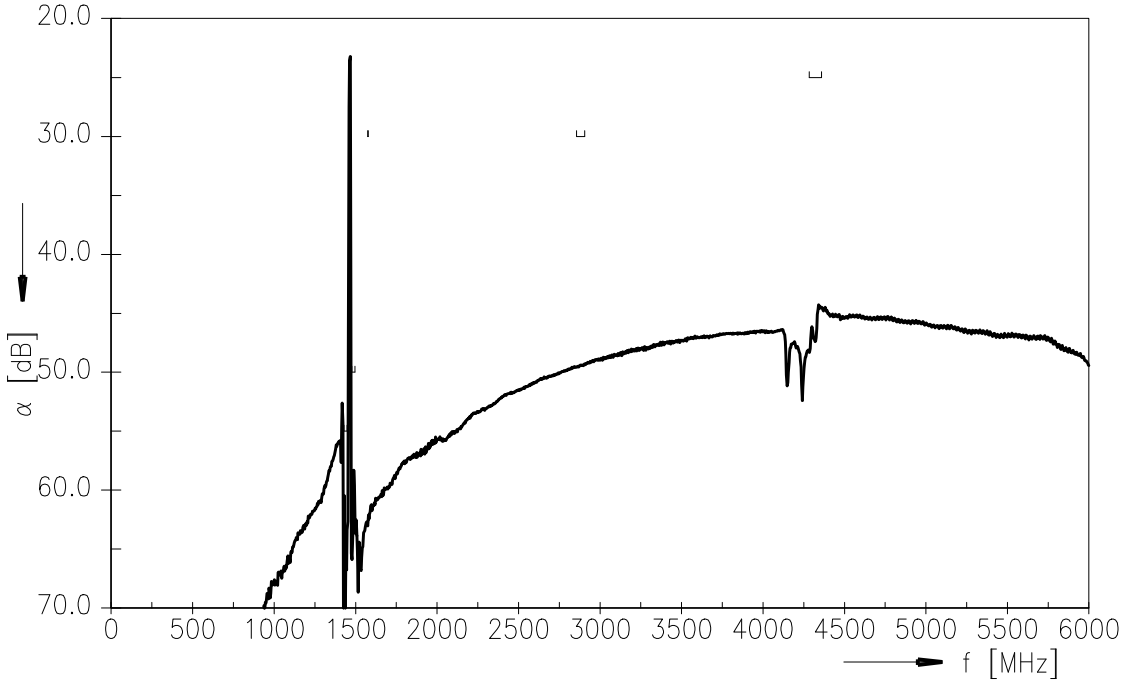
Frequency Response RX-ANT (wideband)



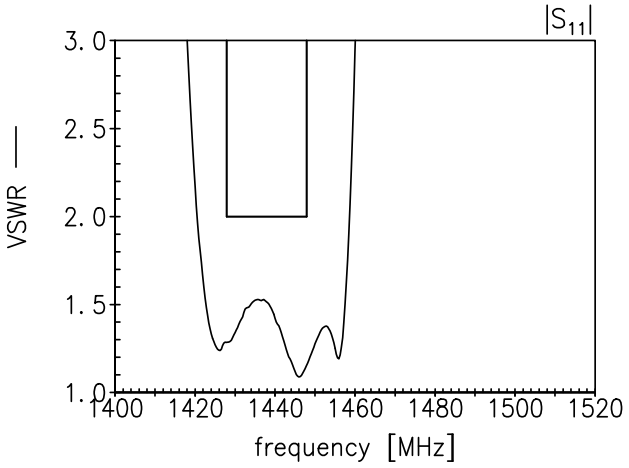
Frequency Response Tx-Rx

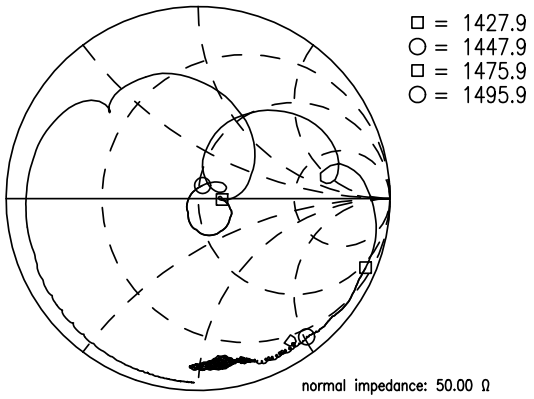


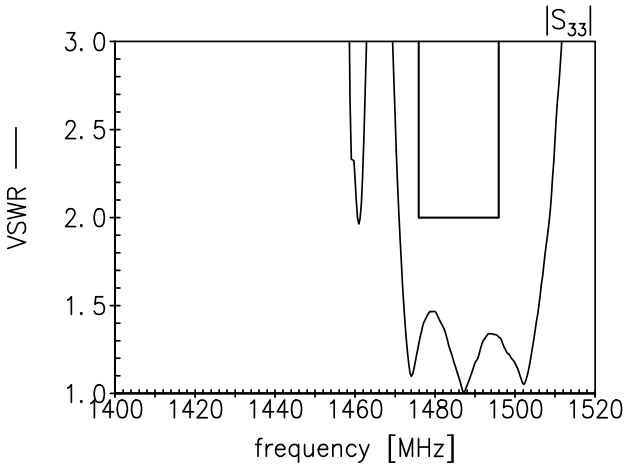
Frequency Response Tx-Rx (wideband)

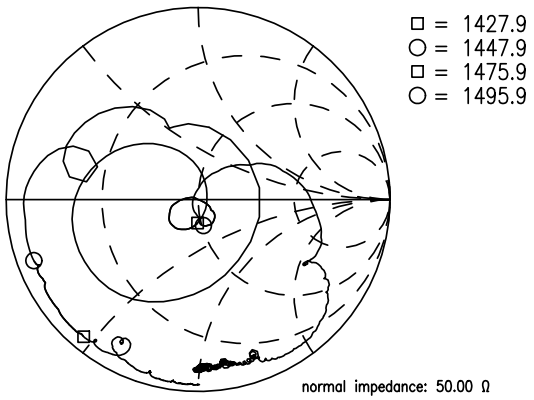


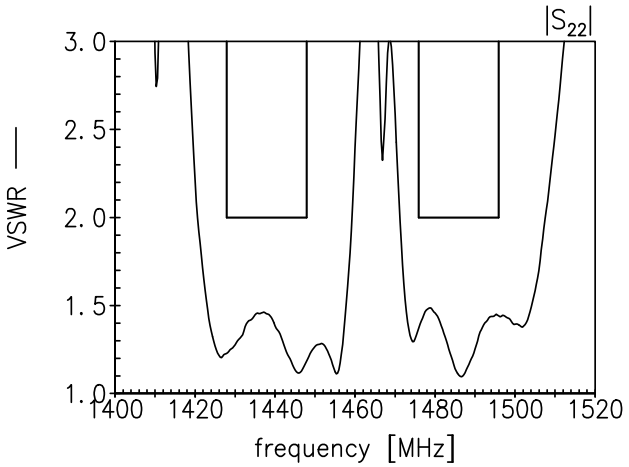
VSWR **S_{11} TX- port** **S_{22} ANT-port** **S_{33} RX-port**

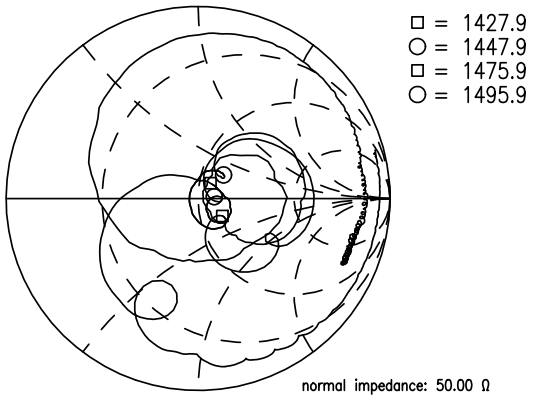












References

Type	B8632
Ordering code	B39142B8632P810
Marking and package	C61157-A8-A68
Packaging	F61074-V8259-Z000
Date codes	L_1126
S-parameters	B8632_NB_UN.s3p, B8632_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 8th, 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 .

Published by EPCOS AG
Systems, Acoustics, Waves Business Group
P.O. Box 80 17 09, 81617 Munich, GERMANY

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous)**. Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
5. We constantly strive to improve our products. Consequently, **the products described in this publication may change from time to time**. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order.
   We also **reserve the right to discontinue production and delivery of products**. Consequently, we cannot guarantee that all products named in this publication will always be available. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.
6. Unless otherwise agreed in individual contracts, **all orders are subject to the current version of the "General Terms of Delivery for Products and Services in the Electrical Industry" published by the German Electrical and Electronics Industry Association (ZVEI)**.
7. The trade names EPCOS, BAOKE, Alu-X, CeraDiode, CeraLink, CeraPlas, CSMP, CSSP, CTVS, DeltaCap, DigiSiMic, DSSP, FilterCap, FormFit, MiniBlue, MiniCell, MKD, MKK, MLSC, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, SIP5D, SIP5K, TFAP, ThermoFuse, WindCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.epcos.com/trademarks.