



RF360
Europe GmbH

SAW Components

SAW band-stop filter

ISDB-T

Series/type:	B8733
Ordering code:	B39731B8733P810
Date:	September 28, 2015
Version:	2.0

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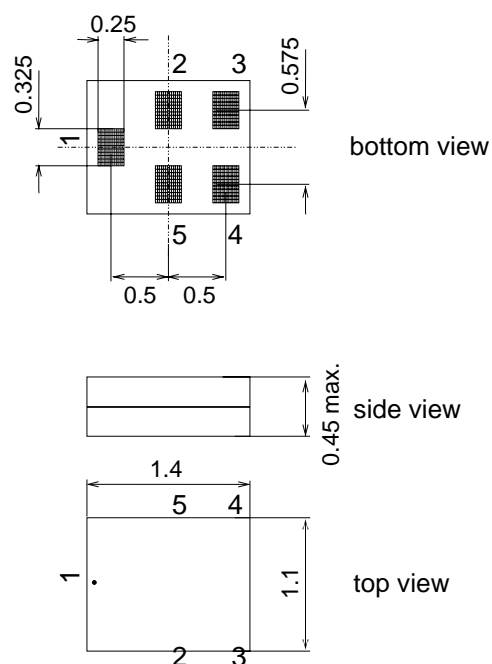
Data sheet


Application

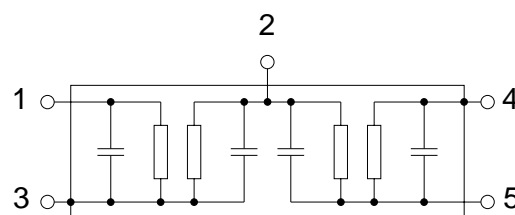
- Low-loss RF band-stop filter for ISDB-T standard
- LTE700 Tx, band 18 and 19 suppression
- Low insertion loss
- Low amplitude ripple and group delay ripple
- Usable pass band width 620 MHz
- Impedance at input and output 50 Ω
- Unbalanced to unbalanced operation


Features

- Package size 1.4 × 1.1 mm²
- Maximum package height of 0.45 mm
- RoHS compatible
- Approximate weight 0.003 g
- Package for **Surface Mount Technology (SMT)**
- **Electrostatic Sensitive Device (ESD)**
- Ni, gold-plated terminals
- **Moisture Sensitivity Level 3**


Pin configuration

- 1 Input
- 2 Ground
- 3 Ground
- 4 Output
- 5 Case ground

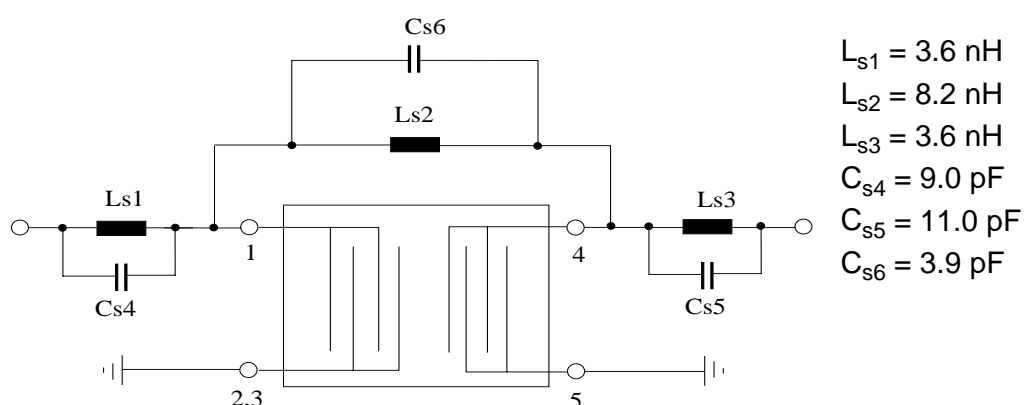


Data sheet

Characteristics (including losses in the matching network)

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

		min.	typ. @ 25 °C	max.	
Nominal center frequency	f_N	—	733.00	—	MHz
Minimum insertion attenuation	α_{\min}	—	0.5	1.0	dB
	470.00 ... 710.00 MHz	—			
Maximum insertion attenuation	α_{\max}	—	0.2	1.0	dB
	90.00 ... 222.00 MHz	—			
	470.00 ... 692.00 MHz	—	2.5	3.5	dB
	692.00 ... 710.00 MHz	—	5.3	7.5	dB
Attenuation	α				
	718.00 ... 748.00 MHz	9.0	24.0	—	dB
	815.00 ... 845.00 MHz	15.0	21.0	—	dB
	900.00 ... 915.00 MHz	40.0	46.0	—	dB
	1574.40 ... 1576.44 MHz	10.0	15.0	—	dB
	1920.00 ... 1980.00 MHz	12.0	17.0	—	dB

Matching network (element values depend on PCB layout)



Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
ESD voltage	V _{ESD}	100 ¹⁾	V	machine model, 10 pulses
		325 ²⁾	V	human body model, 1 pulse
		600 ³⁾	V	charged device model, 3 pulses
Source power at 718 ... 748 MHz	P _{IN}	24	dBm	CW, 10000hrs @ 85 °C

1) acc. to JESD22-A115B (machine model), 10 negative & 10 positive pulses.

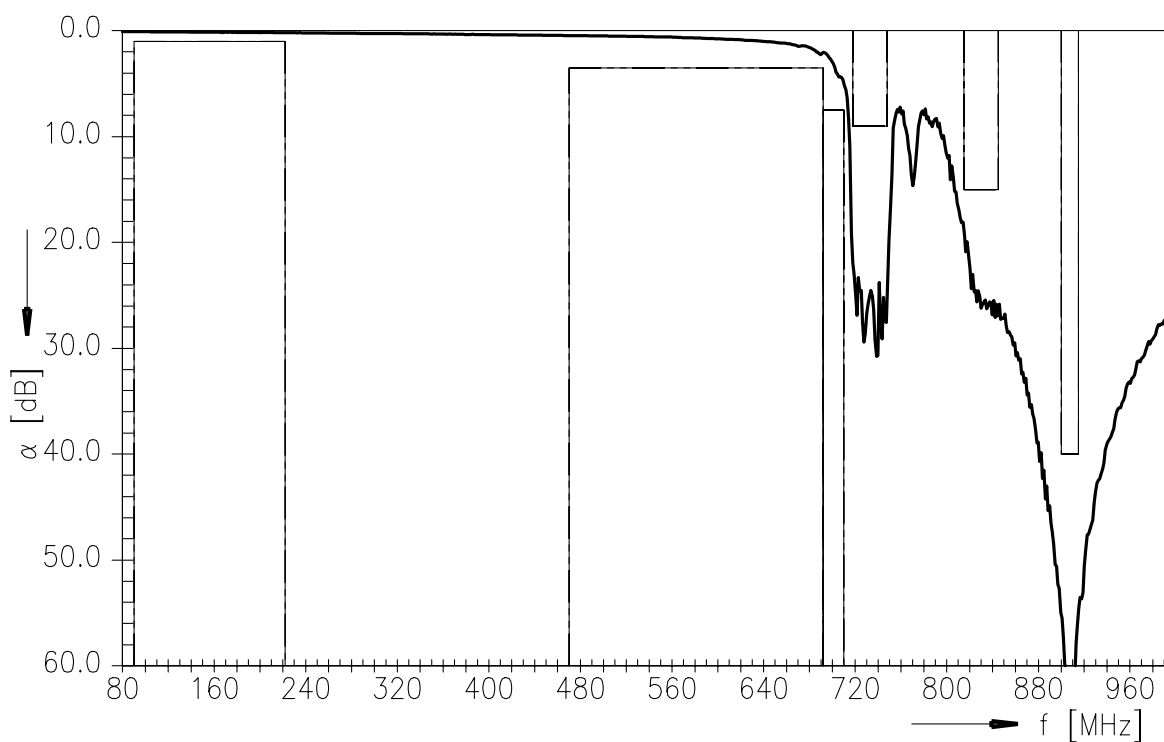
2) acc. to JESD22-A114F (human body model), +/- 1 pulse.

3) acc. to JESD22-C101C (charged device model), +/- 3 pulse.

Data sheet



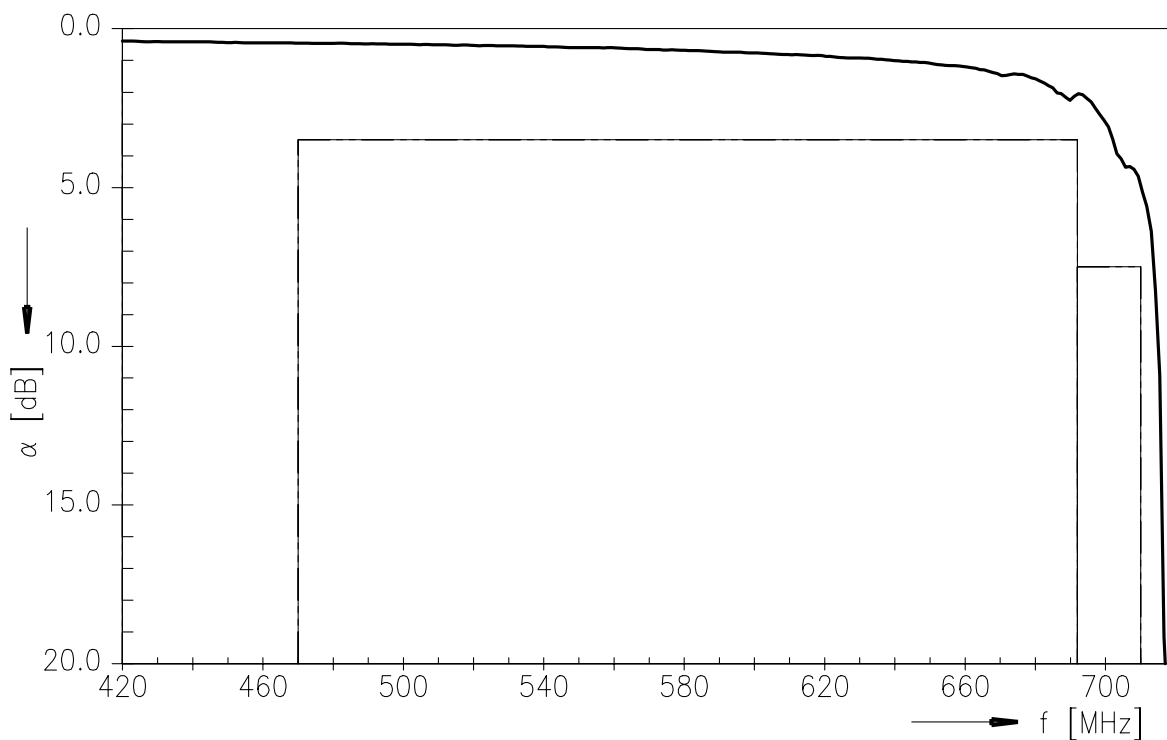
Transfer function



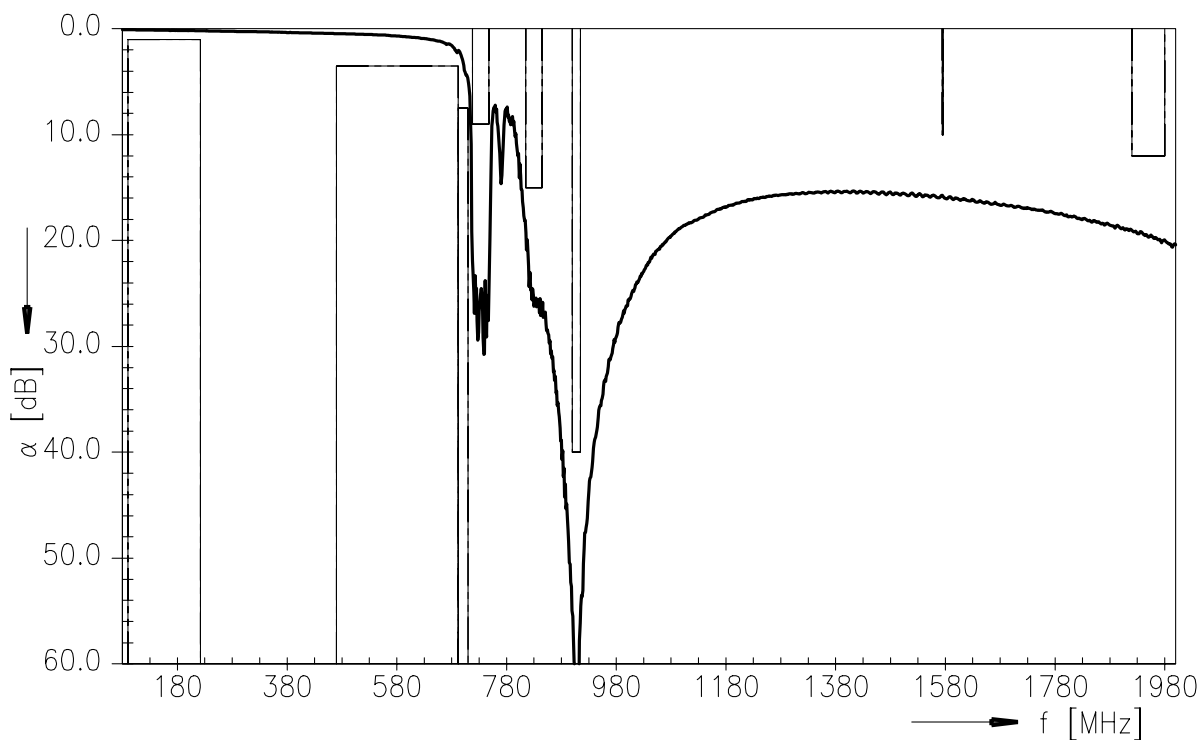
Data sheet



Transfer function (pass band)



Transfer function (wide band)




References

Type	B8733
Ordering code	B39731B8733P810
Marking and package	C61157-A8-A33
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B8733_WB_UN.s4p (unmatched) B8733_WB.s2p (matched) 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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