

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW RF filter

TETRA

Series/type:	B5073
Ordering code:	B39351-B5073-Z810
Date:	Sep 26, 2007
Version:	2.0

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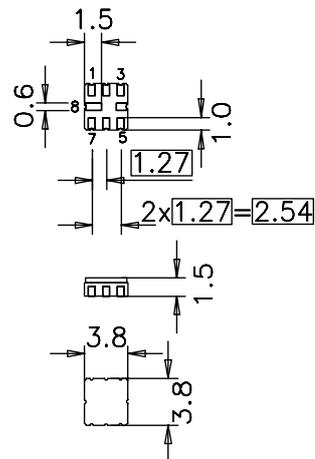
Data sheet


Application

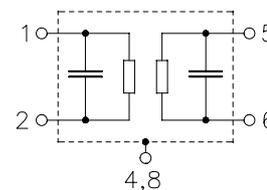
- RF filter for TETRA receiver
- Usable band width 10 MHz


Features

- Package size 3.8 x 3.8 x 1.50 mm³
- Package code QCC8B
- RoHS compatible
- Approx. weight 0.07 g
- Ceramic package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- Filter surface passivated


Pin configuration

- 5 Input
- 1 Output or output balanced
- 2 Output ground or output balanced
- 3, 6, 7 Ground
- 4, 8 Case ground



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B5073
SAW RF filter
355.0 MHz

Data sheet


Characteristics

Operating temperature range: $T = -30$ to 70 °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	355.0	—	MHz
Maximum insertion attenuation	$f_N \pm 5.0$ MHz	—	1.8	3.0 ¹⁾	dB
Amplitude ripple (p-p)	$f_N \pm 5.0$ MHz	—	0.8	2.0 ²⁾	dB
VSWR	$f_N \pm 5.0$ MHz	—	1.5	2.0	
Attenuation	α				
0.1 MHz ... 81.0 MHz		27	70	—	dB
81.0 MHz ... 82.0 MHz		31	65	—	dB
82.0 MHz ... 325.8 MHz		13	60	—	dB
325.8 MHz ... 345.0 MHz		27	55	—	dB
		10	20	—	dB
365.0 MHz ... 390.0 MHz		10	20	—	dB
390.0 MHz ... 404.0 MHz		6	55	—	dB
404.0 MHz ... 421.0 MHz		16	55	—	dB
421.0 MHz ... 442.0 MHz		27	55	—	dB
442.0 MHz ... 512.0 MHz		16	50	—	dB
512.0 MHz ... 523.0 MHz		41	50	—	dB
523.0 MHz ... 781.0 MHz		19	47	—	dB
781.0 MHz ... 1212.0 MHz		26	35	—	dB
1212.0 MHz ... 1626.0 MHz		28	32	—	dB
1626.0 MHz ... 1806.0 MHz		17	32	—	dB
Temperature coefficient of frequency	TC_f	—	-36	—	ppm/K

¹⁾ 2.5dB max at +15°C to +35°C

²⁾ 1.5dB max at +15°C to +35°C

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SAW RF filter

355.0 MHz

Data sheet



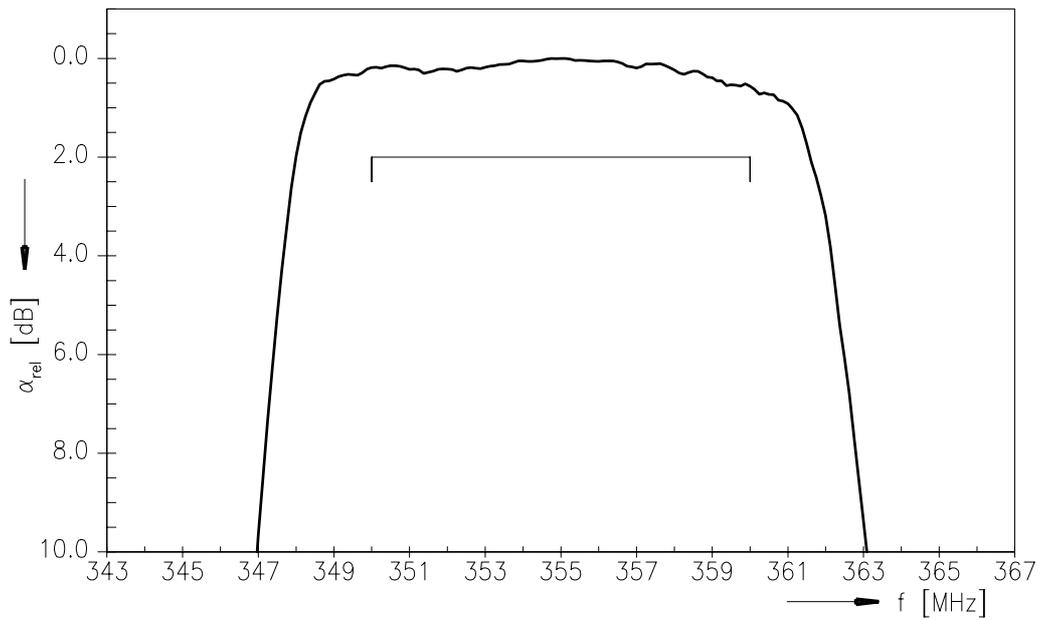
Maximum ratings

Operable temperature range	T	-40/+85	°C	machine model, 10 pulses
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
ESD voltage	V _{ESD}	100 ¹⁾	V	
Input power	P _{IN}	15	dBm	

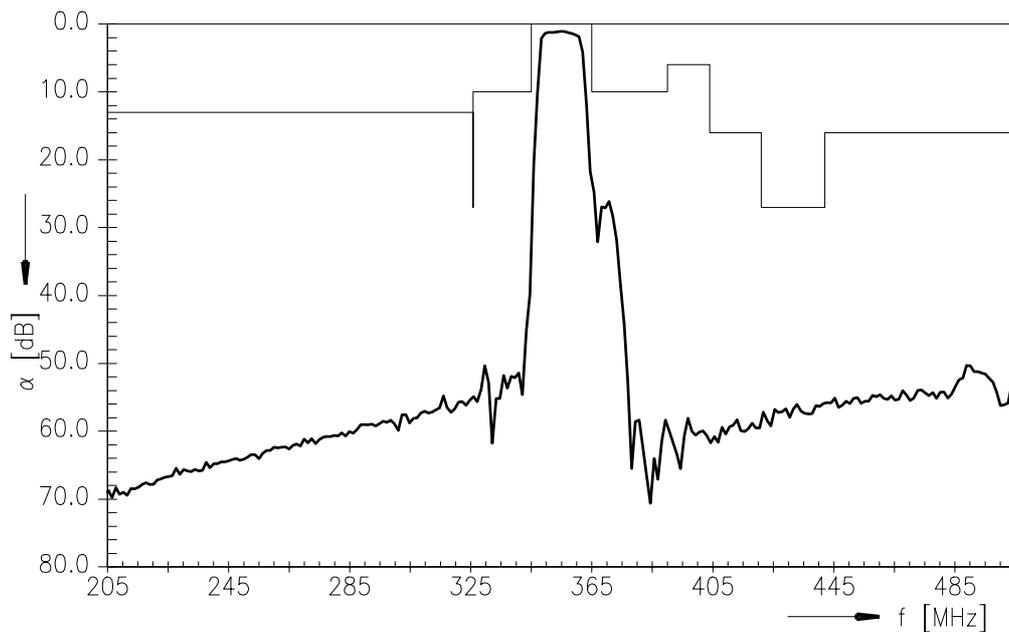
¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function



Transfer function (wideband)



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355.0 MHz

Data sheet



References

Type	B5073
Ordering code	B39351-B5073-Z810
Marking and package	C61157-A7-A46
Packaging	F61074-V8167-Z000
Date codes	L_1126
S-parameters	
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

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

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