

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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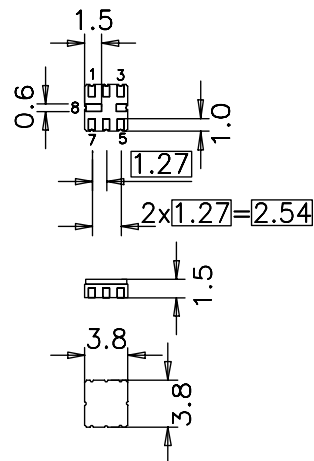
Data sheet


**Application**

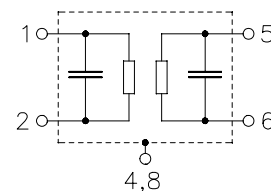
- RF filter for TETRA receiver
- Usable band width 10 MHz

**Features**

- Package size 3.8 x 3.8 x 1.50 mm<sup>3</sup>
- 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



**SAW Components**
**B5073**
**SAW RF filter**
**355.0 MHz**

Data sheet


**Characteristics**

Operating temperature range:

$T = -30 \text{ to } 70 \text{ } ^\circ\text{C}$

Terminating source impedance:

$Z_S = 50 \text{ } \Omega$

Terminating load impedance:

$Z_L = 50 \text{ } \Omega$

		min.	typ. @ 25 °C	max.	
<b>Nominal frequency</b>	$f_N$	—	355.0	—	MHz
<b>Maximum insertion attenuation</b>					
	$f_N \pm 5.0 \text{ MHz}$	$\alpha_{\max}$	1.8	3.0 <sup>1)</sup>	dB
<b>Amplitude ripple (p-p)</b>					
	$f_N \pm 5.0 \text{ MHz}$	$\Delta\alpha$	0.8	2.0 <sup>2)</sup>	dB
<b>VSWR</b>					
	$f_N \pm 5.0 \text{ MHz}$		1.5	2.0	
<b>Attenuation</b>					
		$\alpha$			
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
		27	55	—	dB
325.8 MHz ... 345.0 MHz		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
<b>Temperature coefficient of frequency</b>	$TC_f$	—	− 36	—	ppm/K

<sup>1)</sup> 2.5dB max at +15°C to +35°C

<sup>2)</sup> 1.5dB max at +15°C to +35°C

**SAW Components**

**B5073**

**SAW RF filter**

**355.0 MHz**

Data sheet



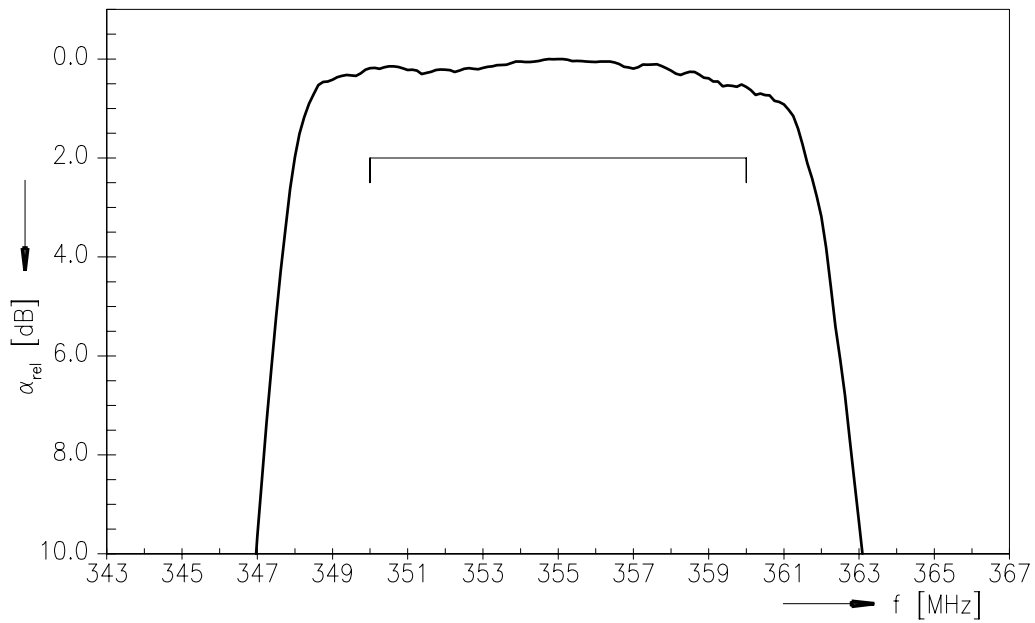
**Maximum ratings**

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

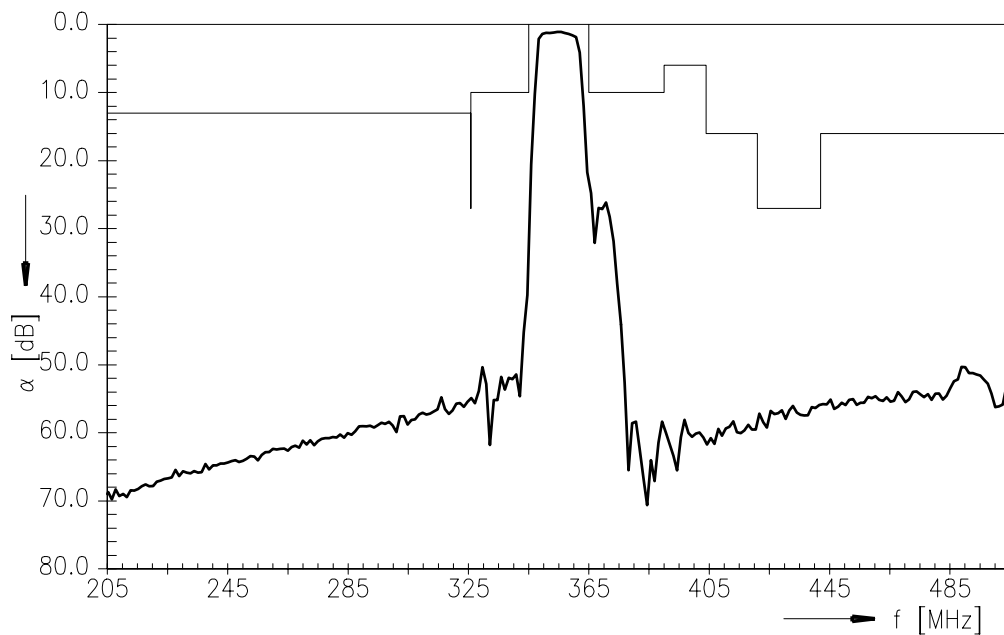
<sup>1)</sup> acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function



Transfer function (wideband)



**SAW Components**

**B5073**

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**355.0 MHz**

Data sheet



## References

<b>Type</b>	B5073
<b>Ordering code</b>	B39351-B5073-Z810
<b>Marking and package</b>	C61157-A7-A46
<b>Packaging</b>	F61074-V8167-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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."

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