



# SAW Components

Data Sheet K 2959 M

Data Sheet

A close-up, grayscale image of a circuit board with the EPCOS logo printed on it. The logo is large and white, contrasting with the dark background of the board. The text "EPCOS" is clearly visible, with the "S" being particularly large and stylized.



## SAW Components

K 2959 M

## IF Filter for Intercarrier Applications

38,00 MHz

### Data Sheet

#### Standard

- B/G
- D/K

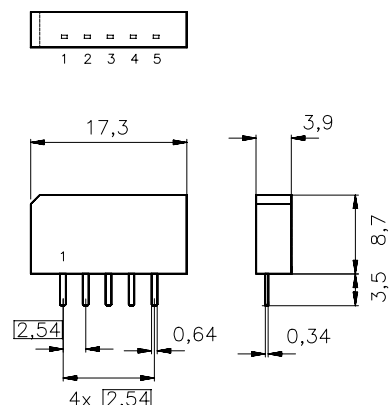
Plastic package **SIP5K**

#### Features

- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- High color carrier level
- Constant group delay

#### Terminals

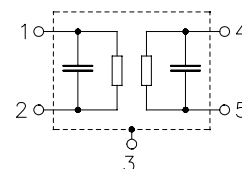
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 g

#### Pin configuration

- |   |                       |
|---|-----------------------|
| 1 | Input                 |
| 2 | Input - ground        |
| 3 | Chip carrier - ground |
| 4 | Output                |
| 5 | Output                |



Type	Ordering code	Marking and package according to	Packing according to
K 2959 M	B39380-K2959-M100	C61157-A1-A15	F61074-V8067-Z000

#### Maximum ratings

Operable temperature range	$T_A$	-25/+65	°C	
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	5	V	between any terminals
AC voltage	$V_{pp}$	10	V	between any terminals



SAW Components	K 2959 M
IF Filter for Intercarrier Applications	38,00 MHz

## Data Sheet

### Characteristics

Reference temperature:  $T_A = 25\text{ °C}$   
Terminating source impedance:  $Z_S = 50\ \Omega$   
Terminating load impedance:  $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
<b>Insertion attenuation</b> $\alpha$					
Reference level for the following data	36,50 MHz	16,5	18,0	19,5	dB
<b>Relative attenuation</b> $\alpha_{\text{rel}}$					
Picture carrier	38,00 MHz	4,1	5,1	6,1	dB
Color carrier	33,57 MHz	0,0	1,0	2,0	dB
Sound carrier	31,50 MHz	17,9	19,4	—	dB
	32,50 MHz	15,5	17,0	18,5	dB
Adjacent picture carrier	30,00 MHz	46,0	55,0	—	dB
	31,00 MHz	40,0	56,0	—	dB
Adjacent sound carrier	39,50 MHz	42,0	52,0	—	dB
	40,50 MHz	43,0	54,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	40,0	46,0	—	dB
Upper sidelobe	39,50 ... 45,00 MHz	35,0	41,0	—	dB
<b>Reflected wave signal suppression</b>					
1,1 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
1,1 $\mu\text{s}$ ... 1,0 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	30	—	ns
<b>Impedance at 36,50 MHz</b>					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	3,0 $\parallel$ 10,8	—	k $\Omega$ $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	3,6 $\parallel$ 2,7	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



SAW Components

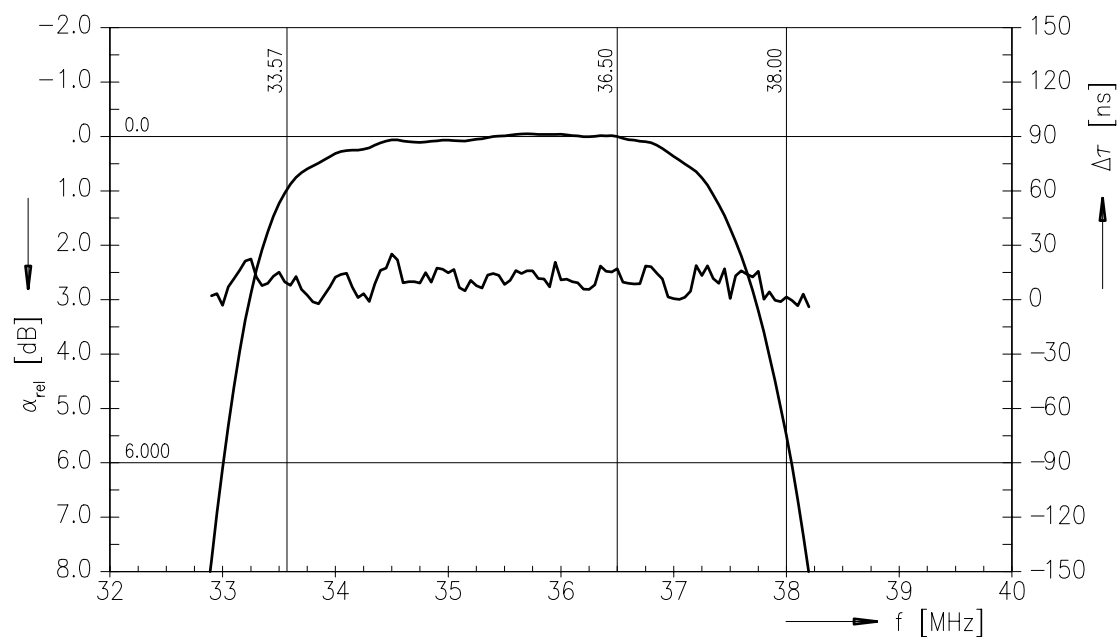
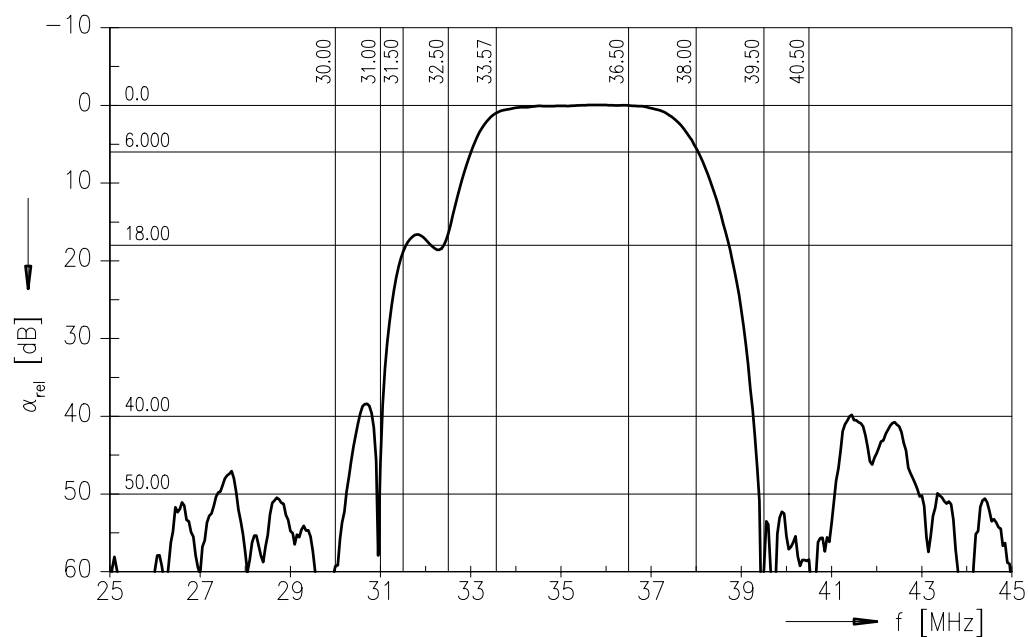
K 2959 M

IF Filter for Intercarrier Applications

38,00 MHz

Data Sheet

Frequency response





SAW Components

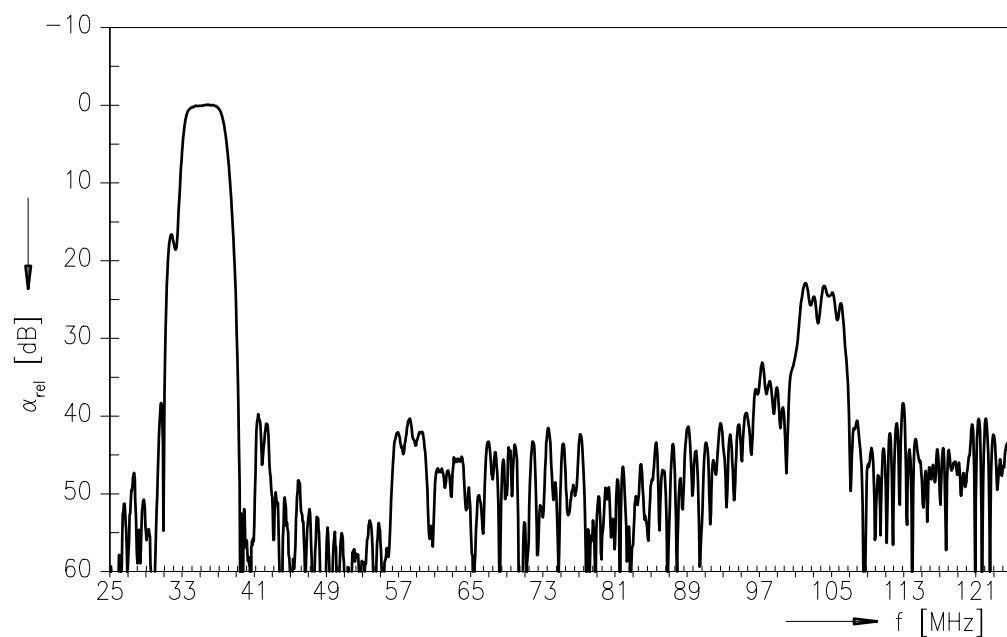
K 2959 M

IF Filter for Intercarrier Applications

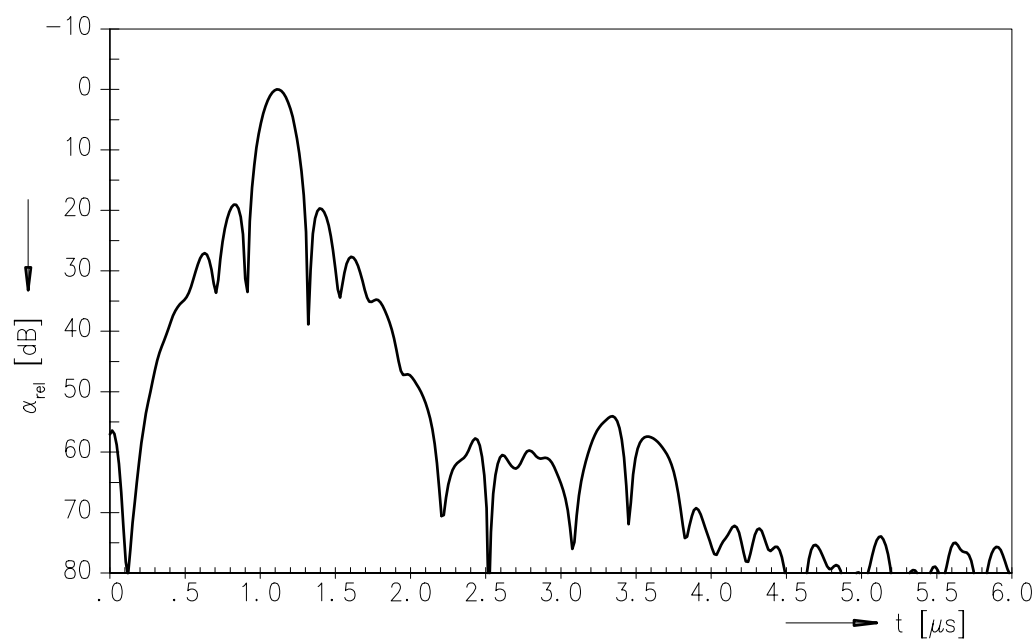
38,00 MHz

Data Sheet

### Frequency response



### Time domain response





<b>SAW Components</b>	<b>K 2959 M</b>
<b>IF Filter for Intercarrier Applications</b>	<b>38,00 MHz</b>

Data Sheet

**Published by EPCOS AG**  
**Surface Acoustic Wave Components Division, SAW CE MM PD**  
**P.O. Box 80 17 09, D-81617 München**

© EPCOS AG 2001. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

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.