



## SAW multimedia filters

### Series/Type: K3953D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39389K3953N201		2011-01-14	2011-09-30	2012-09-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at [www.epcos.com/sales](http://www.epcos.com/sales).



**SAW Components**

**K 3953 D**

**IF Filter for Video Applications**

**33,90 MHz and 38,90 MHz**

**Data Sheet**

**Standard**

Duroplast package **SIP5D**

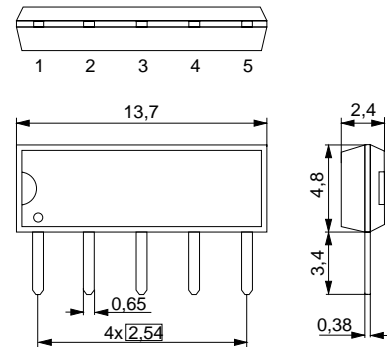
- B/G
- I
- L/L'

**Features**

- TV IF filter with Nyquist slope at 33,90 MHz and 38,90 MHz
- Constant group delay
- Suitable for CENELEC EN 55020
- Standard IC package

**Terminals**

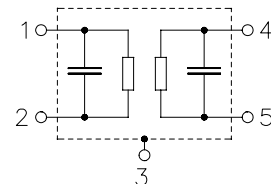
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 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 3953 D	B39389-K3953-N201	C61157-A1-A21	F61074-V8049-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 3953 D**

**IF Filter for Video Applications**

**33,90 MHz and 38,90 MHz**

**Data Sheet**

**Characteristics**

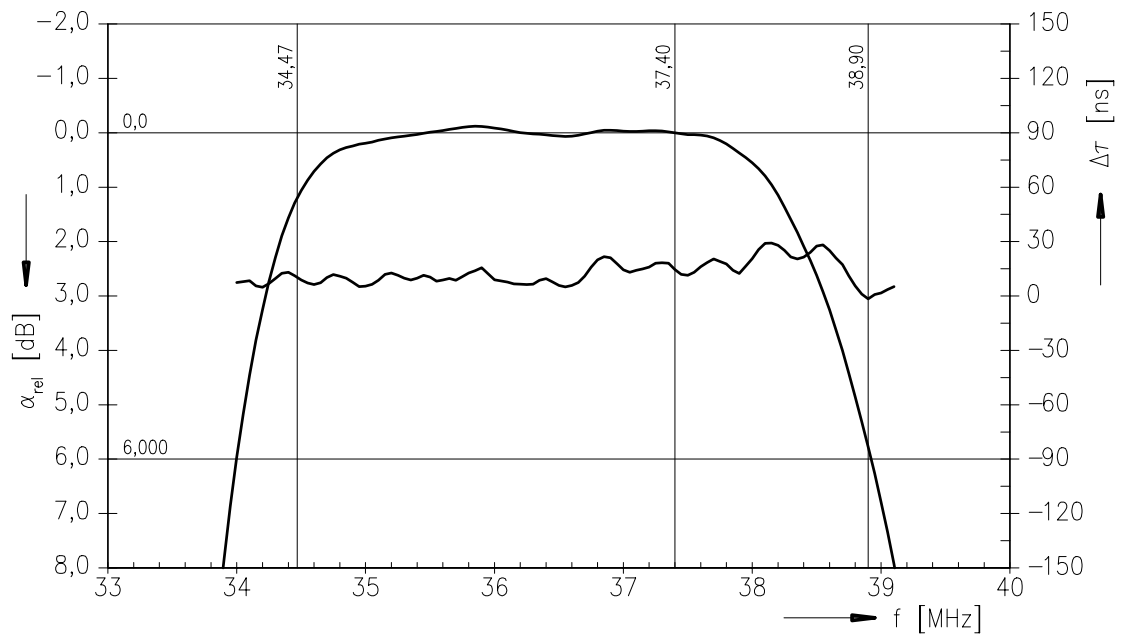
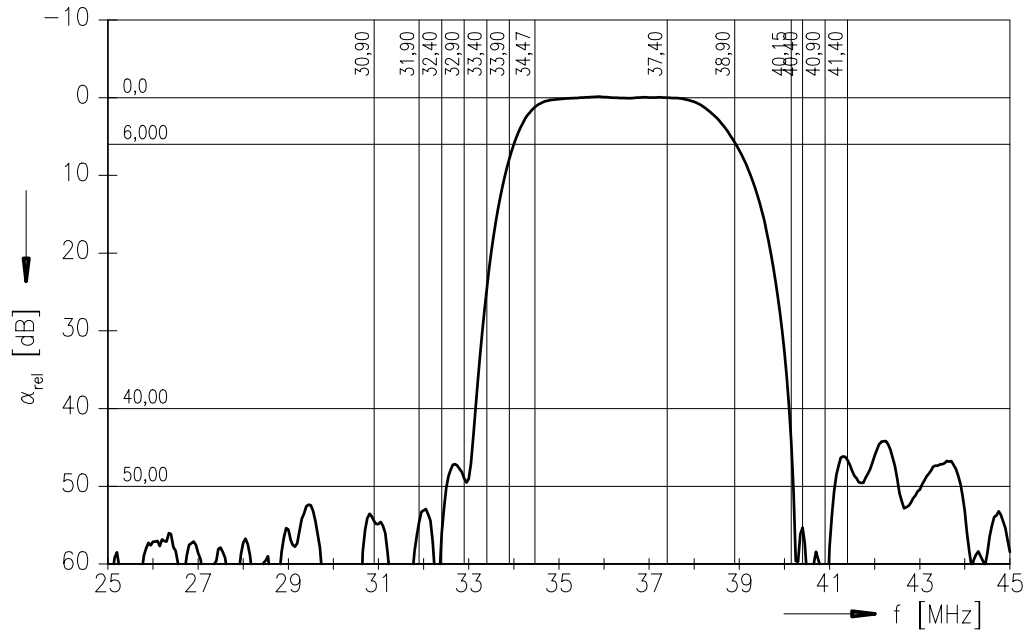
Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	37,40 MHz	12,0	13,5	15,0	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
Picture carrier	38,90 MHz	5,0	6,0	7,0	dB
	33,90 MHz	6,3	7,5	8,7	dB
Color carrier	34,47 MHz	—	1,3	—	dB
Sound carrier	33,40 MHz	20,0	24,0	—	dB
	32,90 MHz	—	49,0	—	dB
	32,40 MHz	—	55,0	—	dB
Adjacent picture carrier	30,90 MHz	48,0	57,0	—	dB
	31,90 MHz	48,0	58,0	—	dB
	40,15 MHz	36,0	46,0	—	dB
Adjacent sound carrier	40,40 MHz	46,0	54,0	—	dB
	41,40 MHz	44,0	50,0	—	dB
	40,90 MHz	46,0	54,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	45,0	54,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	40,0	47,0	—	dB
<b>Reflected wave signal suppression</b>					
1,2 $\mu$ s ... 6,0 $\mu$ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	50,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu$ s ... 1,1 $\mu$ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>					
	$\Delta\tau$	—	50	—	ns
<b>Impedance at 37,40 MHz</b>					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,4    16,9	—	k $\Omega$    pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,6    4,7	—	k $\Omega$    pF
<b>Temperature coefficient of frequency</b>					
	$TC_f$	—	-72	—	ppm/K



Data Sheet

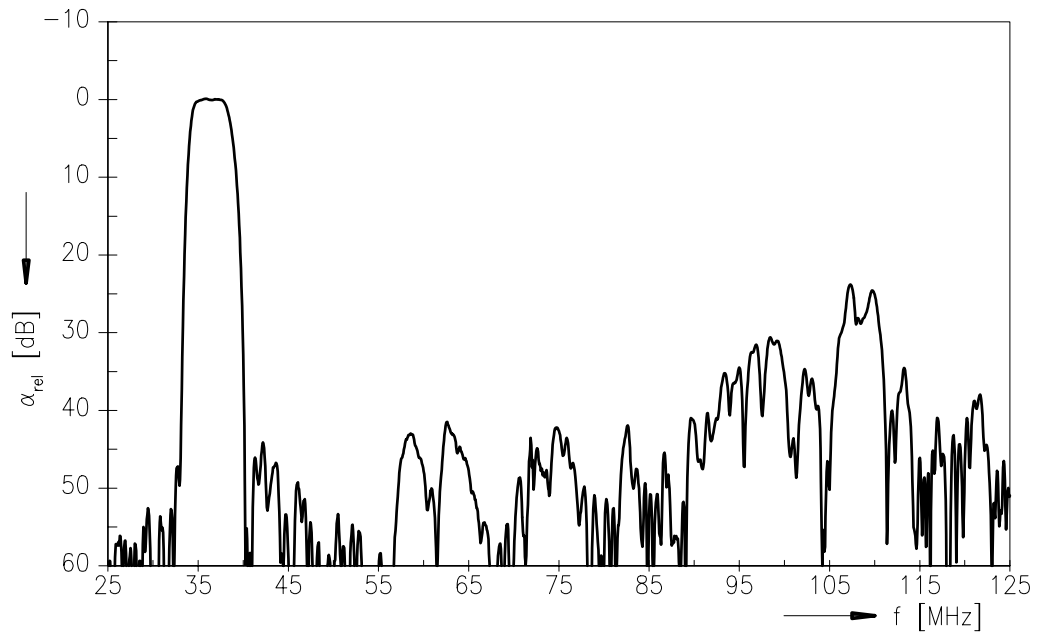
Frequency response



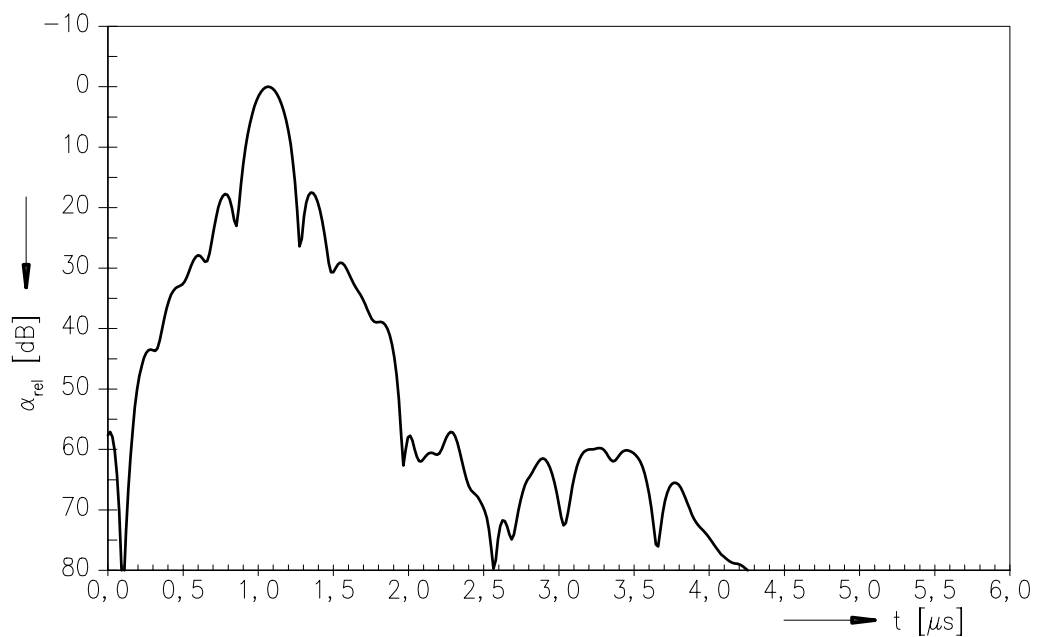


Data Sheet

Frequency response



Time domain response





**SAW Components**

**K 3953 D**

**IF Filter for Video Applications**

**33,90 MHz and 38,90 MHz**

**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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[EPCOS:](#)

[B39389K3953N201](#)