



SAW Components

Data Sheet K 3953 M





SAW Components

K 3953 M

IF Filter for Video Applications

33,90 MHz and 38,90 MHz

Data Sheet

Standard

- B/G
- D/K
- I
- L/L'

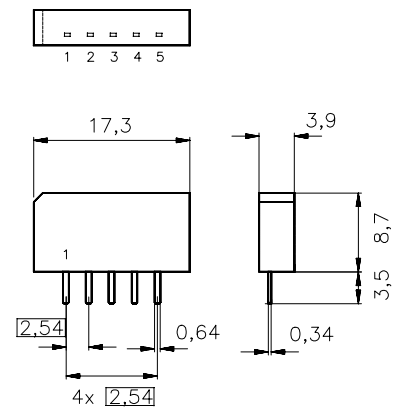
Features

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

Terminals

- Tinned CuFe alloy

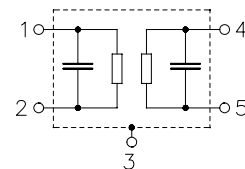
Plastic package **SIP5K**



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 3953 M	B39389-K3953-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 3953 M

IF Filter for Video Applications

33,90 MHz and 38,90 MHz

Data Sheet

Characteristics

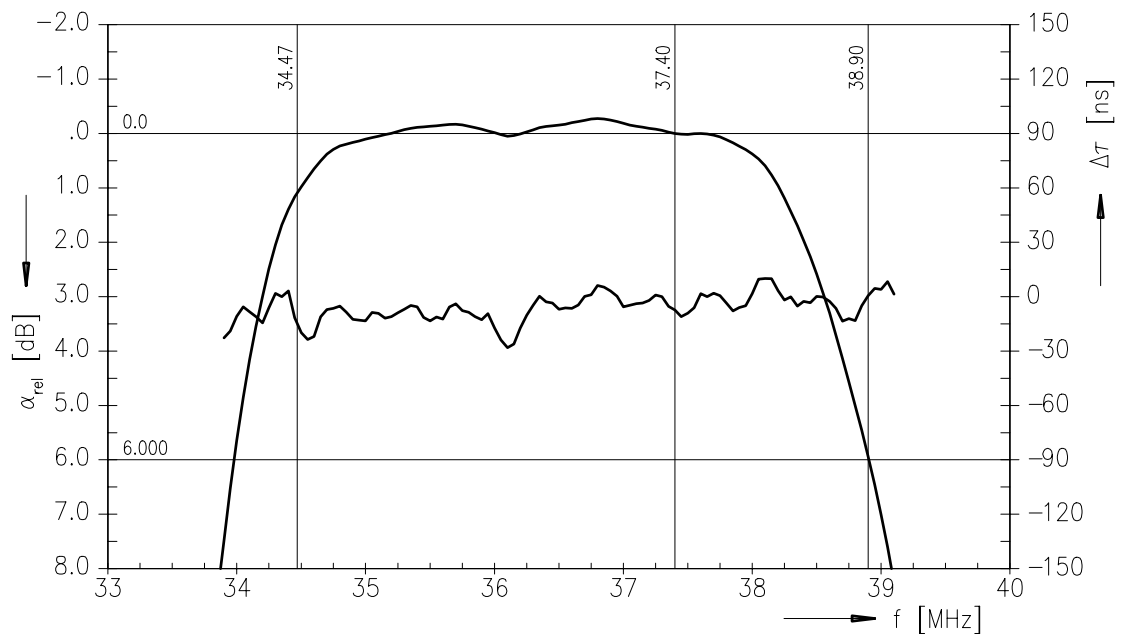
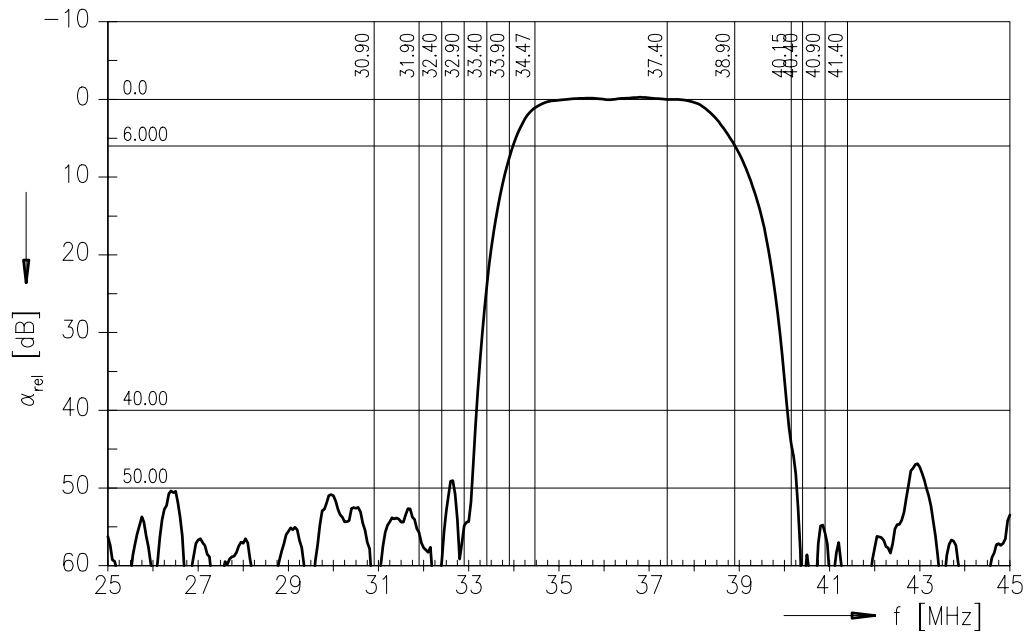
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	37,40 MHz	12,0	13,5	15,0	dB
Relative attenuation					
	α_{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	—	54,0	—	dB
	32,40 MHz	—	63,0	—	dB
Adjacent picture carrier	30,90 MHz	48,0	62,0	—	dB
	31,90 MHz	48,0	59,0	—	dB
	40,15 MHz	36,0	40,0	—	dB
Adjacent sound carrier	40,40 MHz	48,0	59,0	—	dB
	41,40 MHz	46,0	60,0	—	dB
	40,90 MHz	46,0	59,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	45,0	52,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	38,0	44,0	—	dB
Reflected wave signal suppression					
1,2 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	50,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)					
	$\Delta\tau$	—	50	—	ns
Impedance at 37,40 MHz					
	Input: $Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,4 \parallel 16,9	—	k Ω \parallel pF
	Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,6 \parallel 4,7	—	k Ω \parallel pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K



Data Sheet

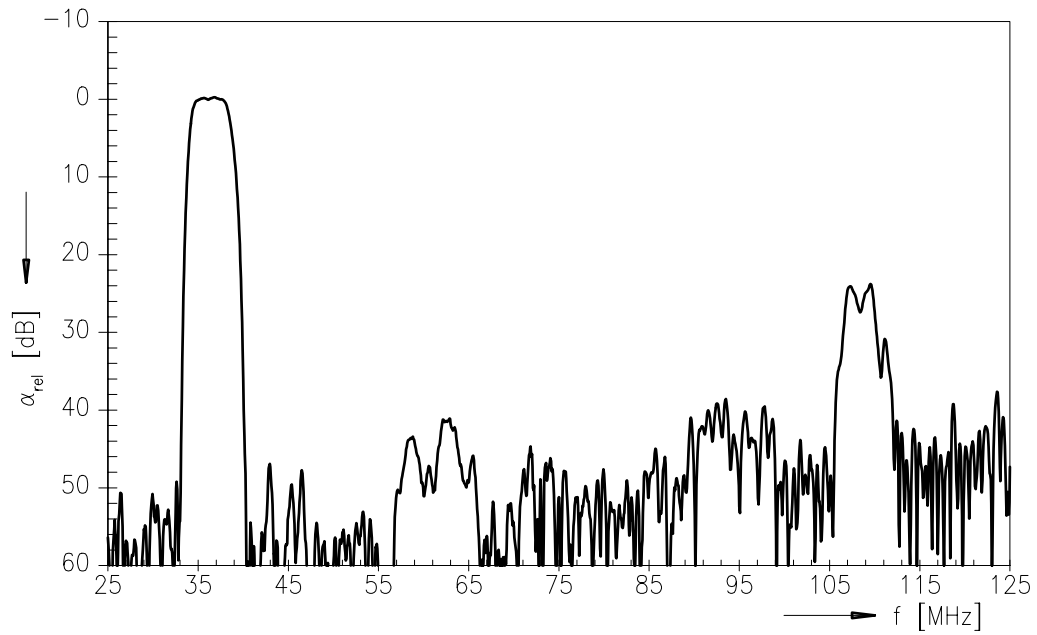
Frequency response



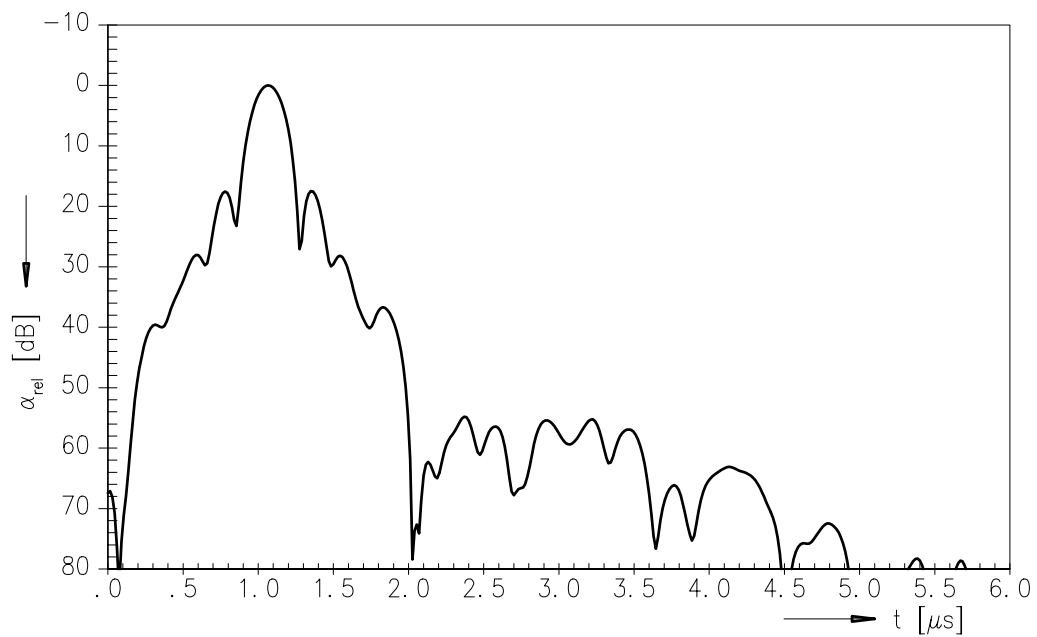


Data Sheet

Frequency response



Time domain response





SAW Components

K 3953 M

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.