EPCOS

SAW Components

Data Sheet K 3953 M

Data Sheet

Standard

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

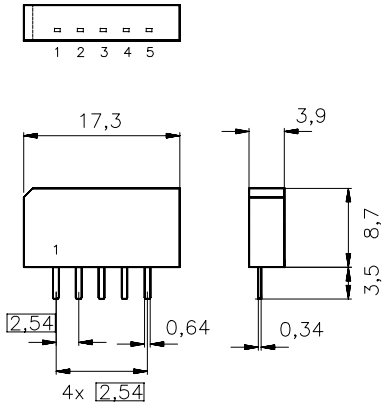
Features

- 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

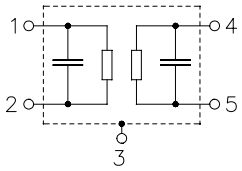
Plastic package **SIP5K**



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

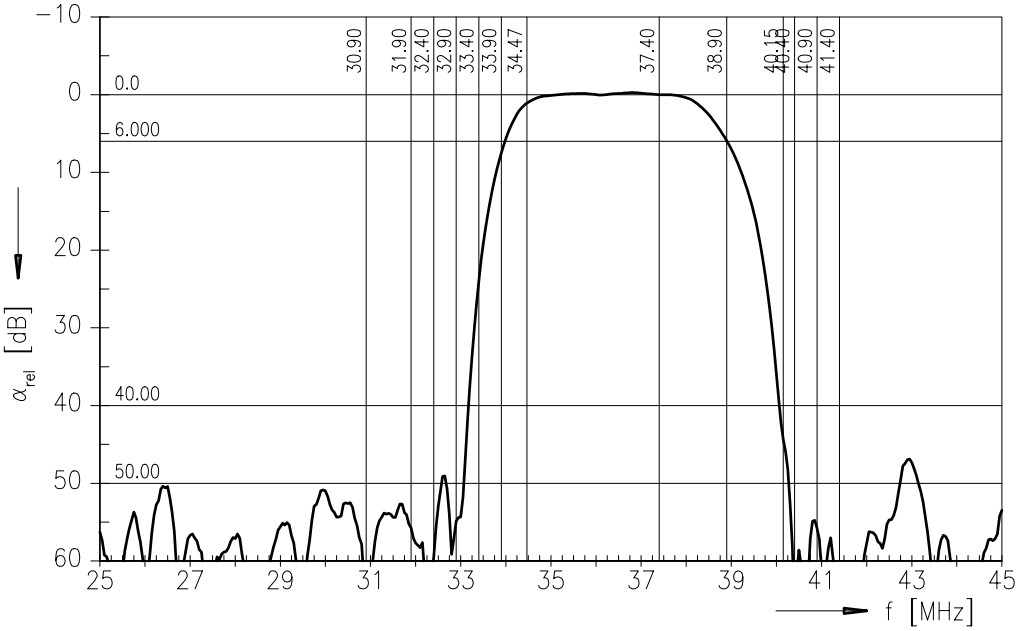
Operable temperature range	T_A	–25/+65	°C	
Storage temperature range	T_{stg}	–40/+85	°C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

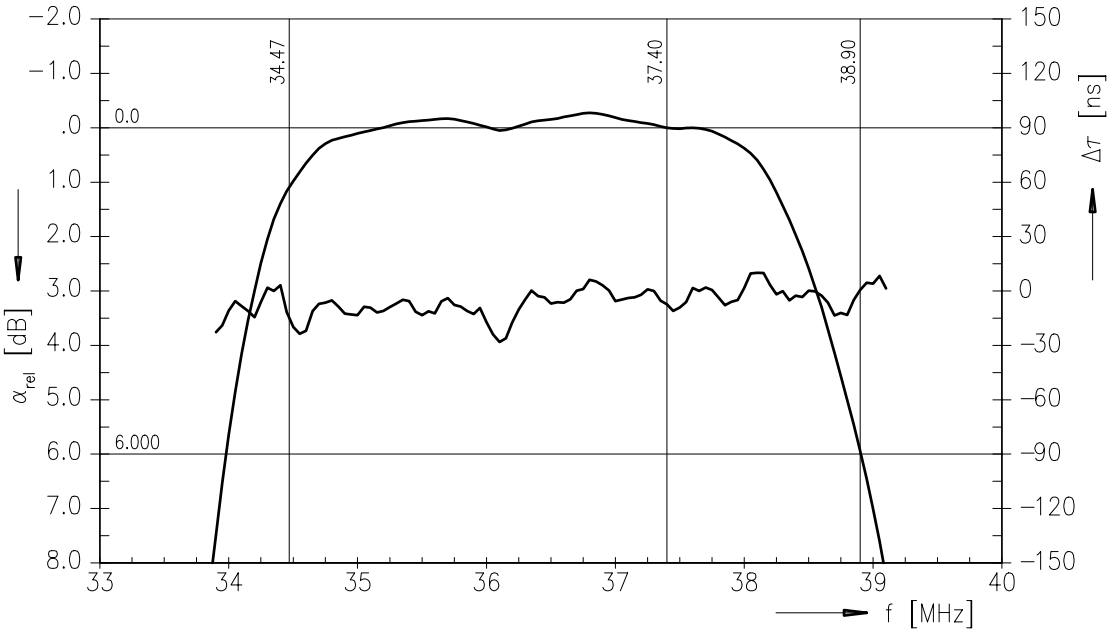
Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

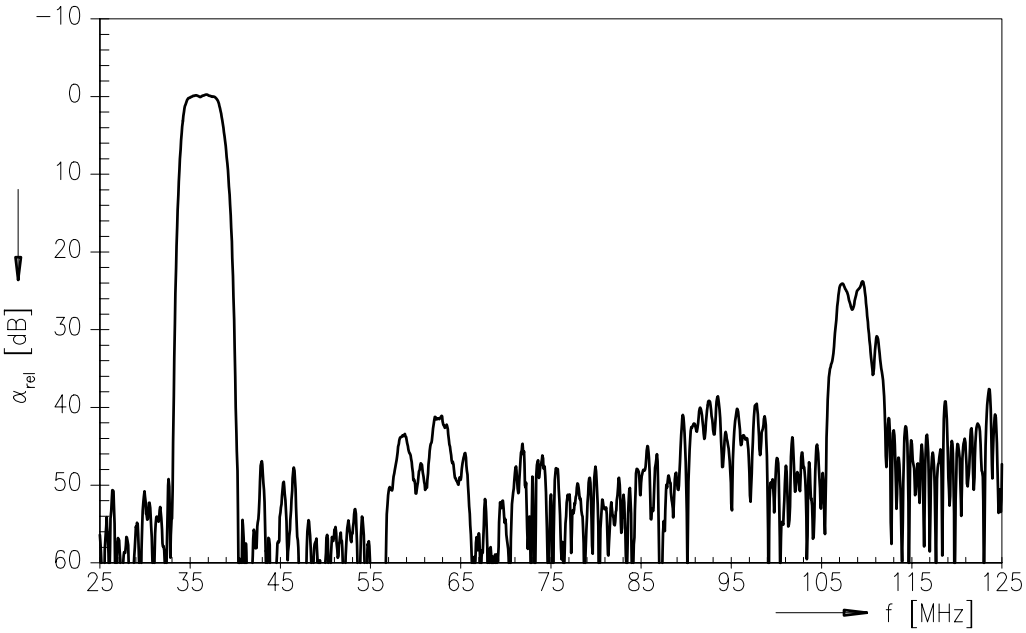
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		37,40 MHz		12,0	13,5	15,0	dB
Relative attenuation			α_{rel}				
Picture carrier		38,90 MHz		5,0	6,0	7,0	dB
		33,90 MHz		6,3	7,5	8,7	dB
Color carrier		34,47 MHz		—	1,3	—	dB
Sound carrier		33,40 MHz		20,0	24,0	—	dB
		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 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)				42,0	50,0	—	dB
Feedthrough signal suppression							
1,2 µs ... 1,1 µs before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)				50,0	56,0	—	dB
Group delay ripple (p-p)			Δτ	—	50	—	ns
Impedance at 37,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	1,4 ‖ 16,9	—	kΩ ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	1,6 ‖ 4,7	—	kΩ ‖ pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

Frequency response

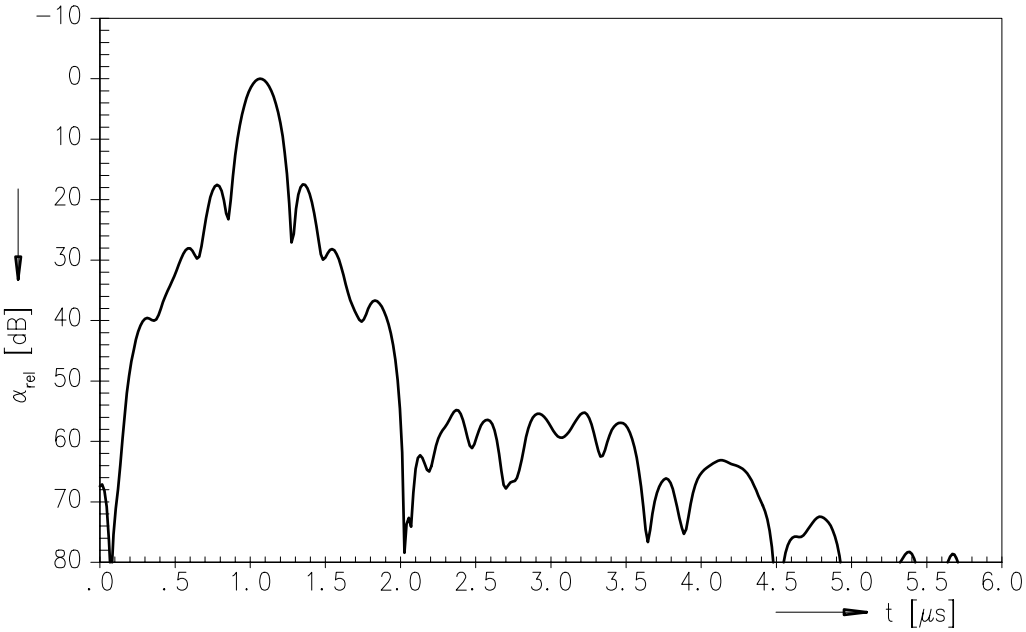




Frequency response



Time domain response



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