EPCOS

SAW Components

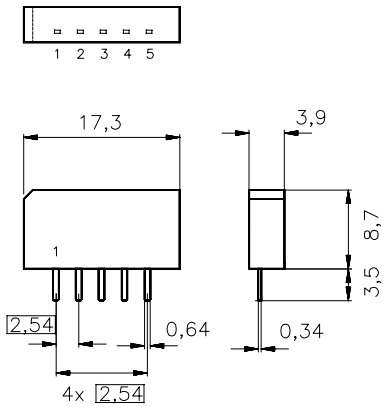
Data Sheet K 2971 M

Data Sheet

Standard

- B/G
- D/K

Plastic package **SIP5K**



Dimensions in mm, approx. weight 1,0 g

Features

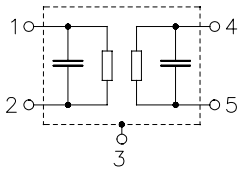
- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 32,40 MHz and 33,40 MHz
- Group delay predistortion

Terminals

- Tinned CuFe alloy

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 2971 M	B39389-K2971-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

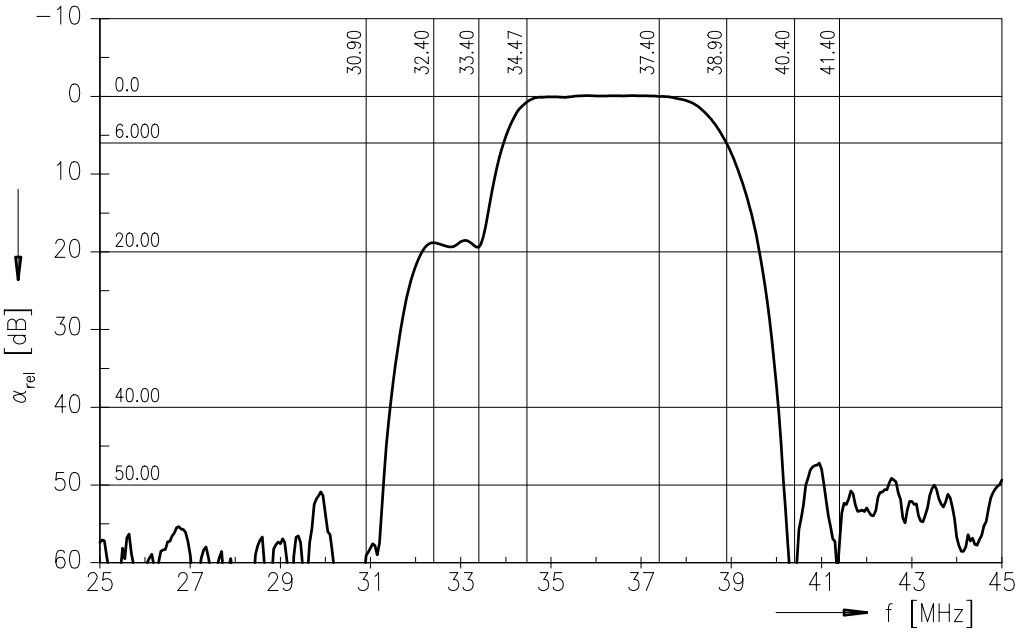
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	12	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

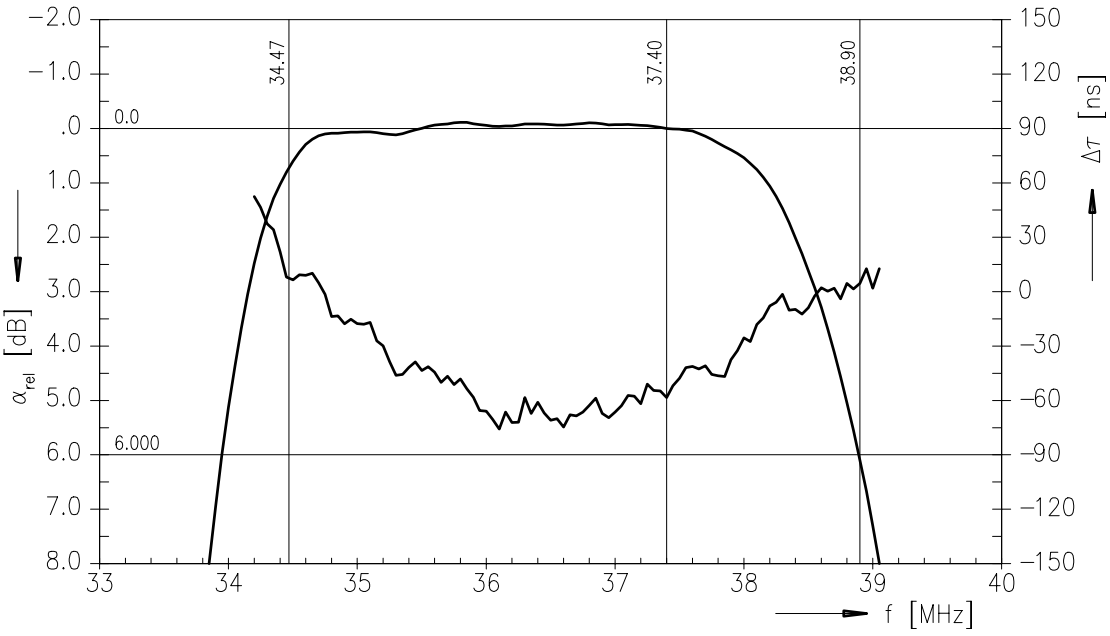
Characteristics

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

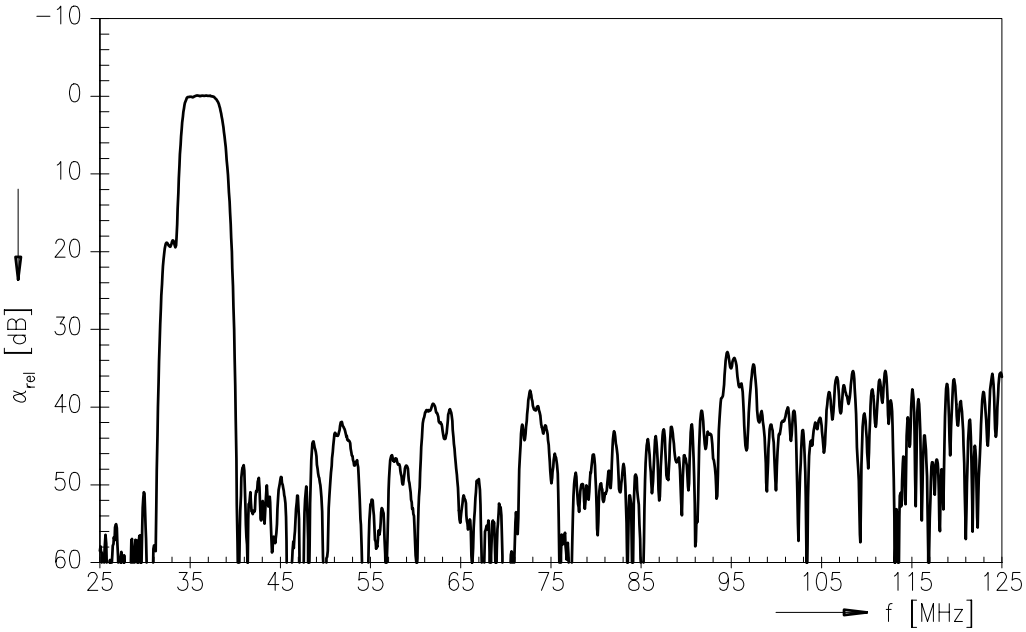
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	37,40 MHz		14,8	16,3	17,8	dB
Relative attenuation		α_{rel}				
Picture carrier	38,90 MHz		4,8	5,8	6,8	dB
Color carrier	34,47 MHz		-0,3	0,7	1,7	dB
Sound carrier	32,40 MHz		17,1	18,6	20,1	dB
	33,40 MHz		17,7	19,2	—	dB
Adjacent picture carrier	30,90 MHz		46,0	56,0	—	dB
Adjacent sound carrier	40,40 MHz		43,0	52,0	—	dB
	41,40 MHz		42,0	51,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz		44,0	51,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz		40,0	46,0	—	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	53,0	—	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 predistortion (reference frequency 38,90 MHz)		$\Delta\tau$				
	36,50 MHz		—	–70	—	ns
	34,47 MHz		—	20	—	ns
Impedance at 37,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	2,0 ‖ 12,1	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	3,0 ‖ 2,8	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

Frequency response

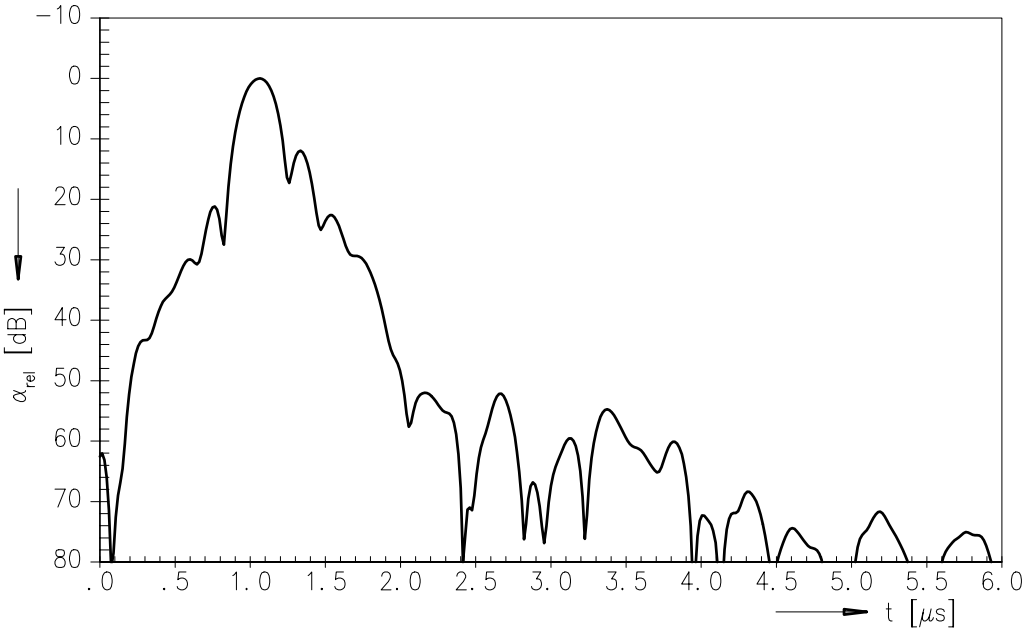




Frequency response



Time domain response



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