EPCOS

SAW Components

Data Sheet X 6989 D



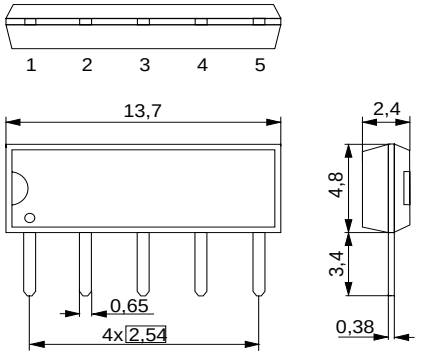
Duroplast package **SIP5D**

Features

- IF filter for digital cableTV
- Standard IC package

Terminals

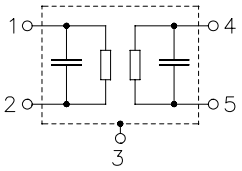
- Tinned CuFe alloy



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
X 6989 D	B39570-X6989-N201	C61157-A1-A21	F61074-V8049-Z000

Maximum ratings

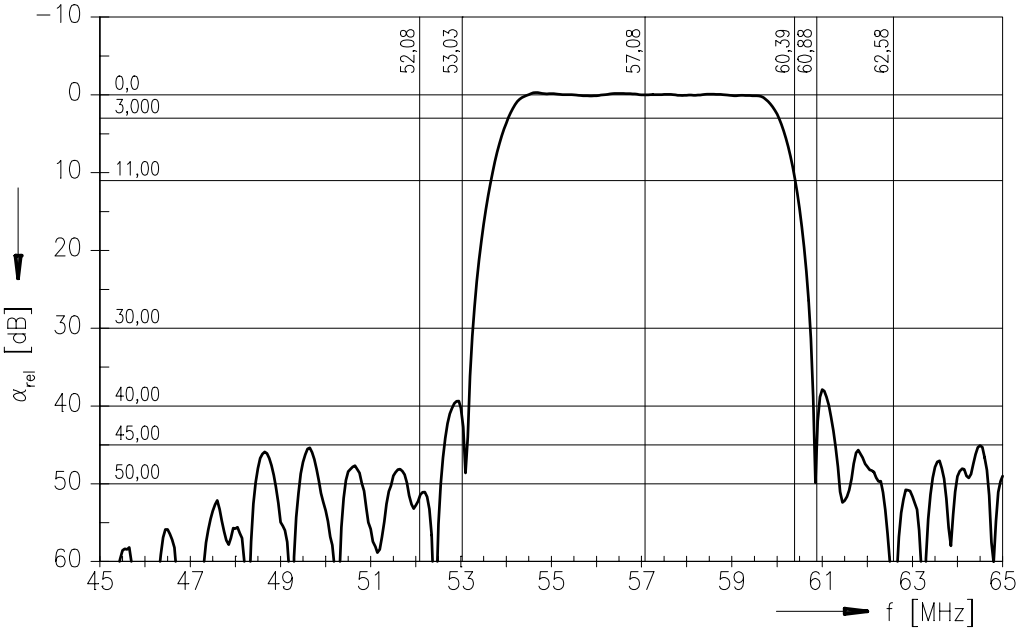
Operable temperature range	T_A	–25/+75	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

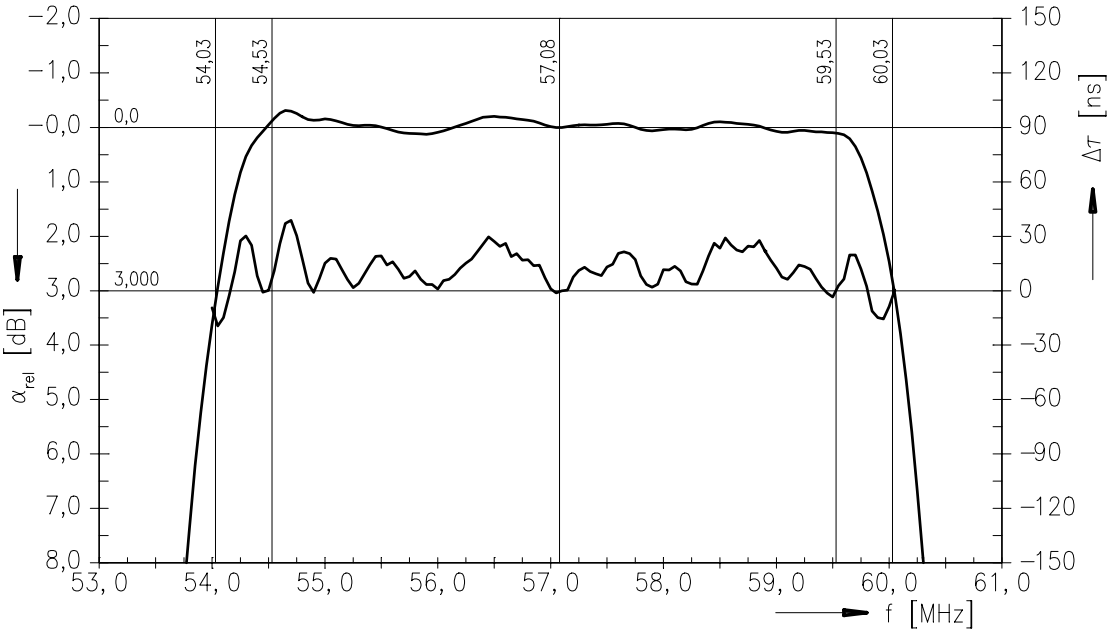
Characteristics

Reference temperature: T_A = 25 (45) ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

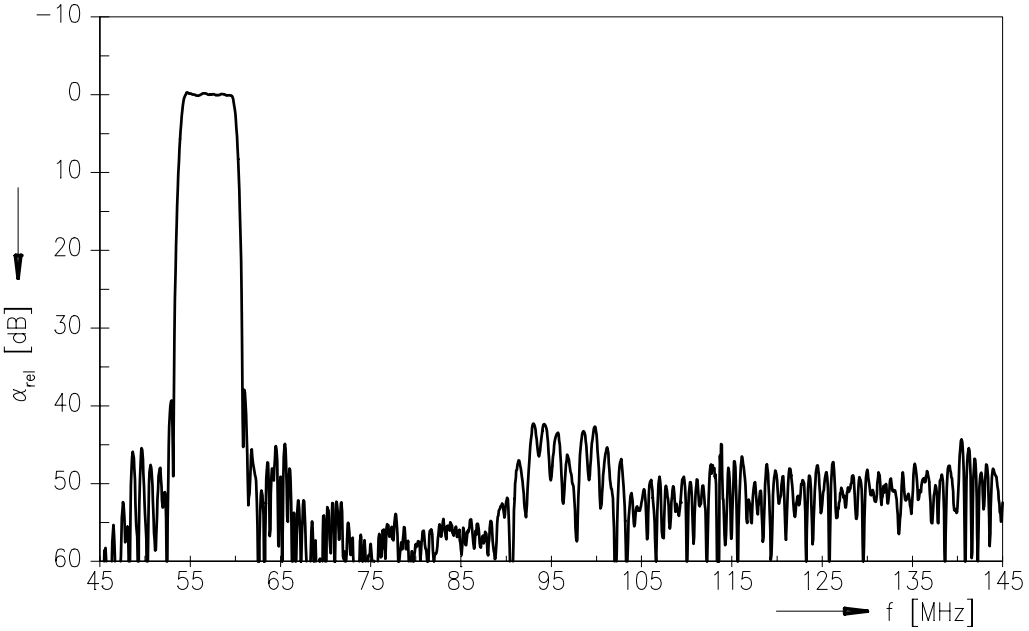
		min.	typ.	max.	
Insertion attenuation	α				
Reference level for the following data 57,08 (57,00) MHz		11,1	12,6	14,1	dB
Pass bandwidth					
α_{rel} ≤3 dB	B_{3dB}	—	6,0	—	MHz
α_{rel} ≤30 dB	B_{30dB}	—	7,5	—	MHz
Relative attenuation	α_{rel}				
54,53 (54,45) MHz		–1,2	–0,2	0,8	dB
59,53 (59,45) MHz		–0,9	0,1	1,1	dB
54,03 (53,95) MHz		—	2,7	—	dB
60,03 (59,95) MHz		—	3,4	—	dB
60,39 (60,31) MHz		—	11,0	—	dB
Lower sidelobe					
45,08 ... 52,08 (45,00 ... 52,00) MHz		38,0	43,0	—	dB
52,08 ... 53,03 (52,00 ... 52,95) MHz		34,0	39,0	—	dB
Upper sidelobe					
60,88 ... 62,58 (60,80 ... 62,50) MHz		32,0	38,0	—	dB
62,58 ... 65,08 (62,50 ... 65,00) 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 57,08 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,3 µs ... 1,2 µs before main pulse (test pulse 250 ns, carrier frequency 57,08 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	Δτ				
Aperture 50 kHz					
54,03 ... 60,08 (53,95 ... 60,00) MHz		—	50	—	ns
Impedance at 57,08 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	0,7‖17,4	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	0,8‖ 4,4	—	kΩ || pF
Temperature coefficient of frequency	TC_f	—	–72	—	ppm/K

Frequency response

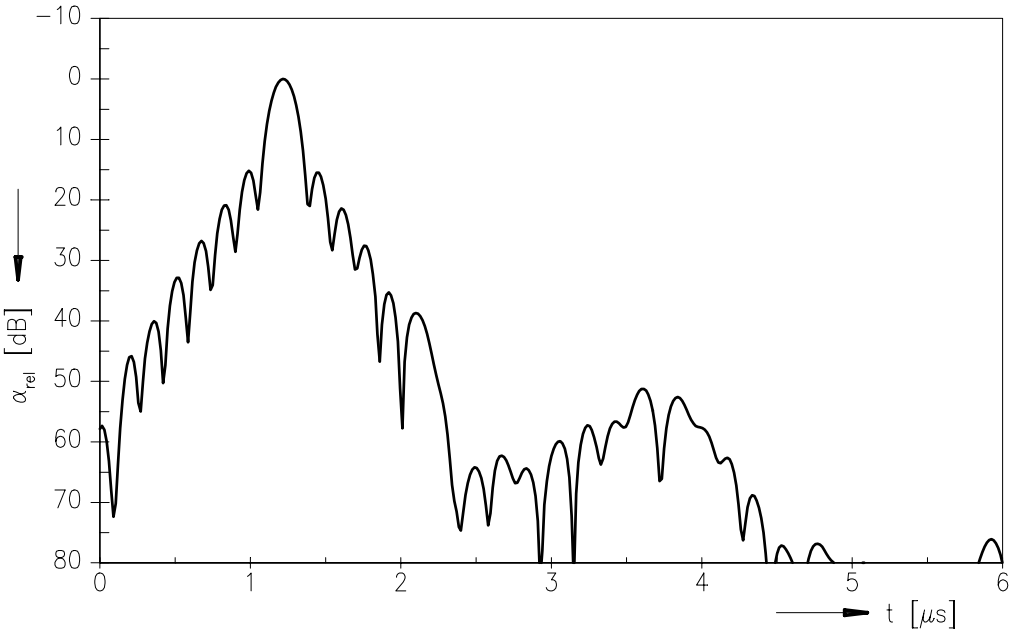




Frequency response



Time domain response



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