



SAW Components

Data Sheet N 3958 M

Data Sheet

EPCOS



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N 3958 M

IF Filter for Video Applications

58,75 MHz

Data Sheet

Standard

Plastic package **SIP5K**

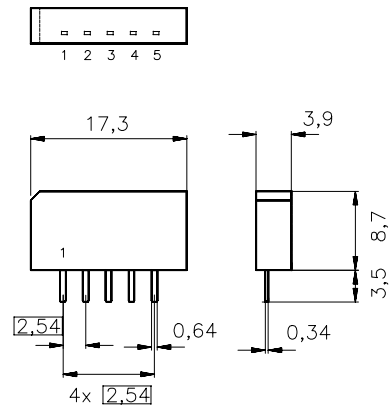
■ M

Features

- TV IF filter with Nyquist slope and sound suppression
- Constant group delay

Terminals

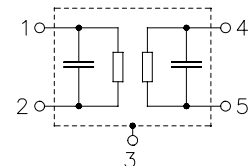
- Tinned CuFe alloy



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
N 3958 M	B39588-N3958-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



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Characteristics

Reference temperature: $T_A = 25 (45) ^\circ \text{C}$
 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	57,08 (57,00) MHz	11,3	12,8	14,3	dB
Relative attenuation	α_{rel}				
Picture carrier	58,83 (58,75) MHz	4,8	5,8	6,8	dB
Color carrier	55,25 (55,17) MHz	1,8	2,8	3,8	dB
Sound carrier	54,33 (54,25) MHz	30,0	40,0	—	dB
Adjacent picture carrier	52,83 (52,75) MHz	44,0	54,0	—	dB
Adjacent sound carrier	60,33 (60,25) MHz	40,0	48,0	—	dB
Lower sidelobe					
45,08 ... 52,83 (45,00 ... 52,75) MHz		40,0	46,0	—	dB
Upper sidelobe					
60,33 ... 65,08 (60,25 ... 65,00) MHz		36,0	42,0	—	dB
Reflected wave signal suppression					
1,1 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 57,08 (57,00) MHz)		42,0	48,0	—	dB
Feedthrough signal suppression					
1,2 μs ... 1,1 μs before main pulse (test pulse 250 ns, carrier frequency 57,08 (57,00) MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$	—	60	—	ns
Impedance at 57,08 (57,00) MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,2 $\parallel$ 8,9	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	0,8 $\parallel$ 2,7	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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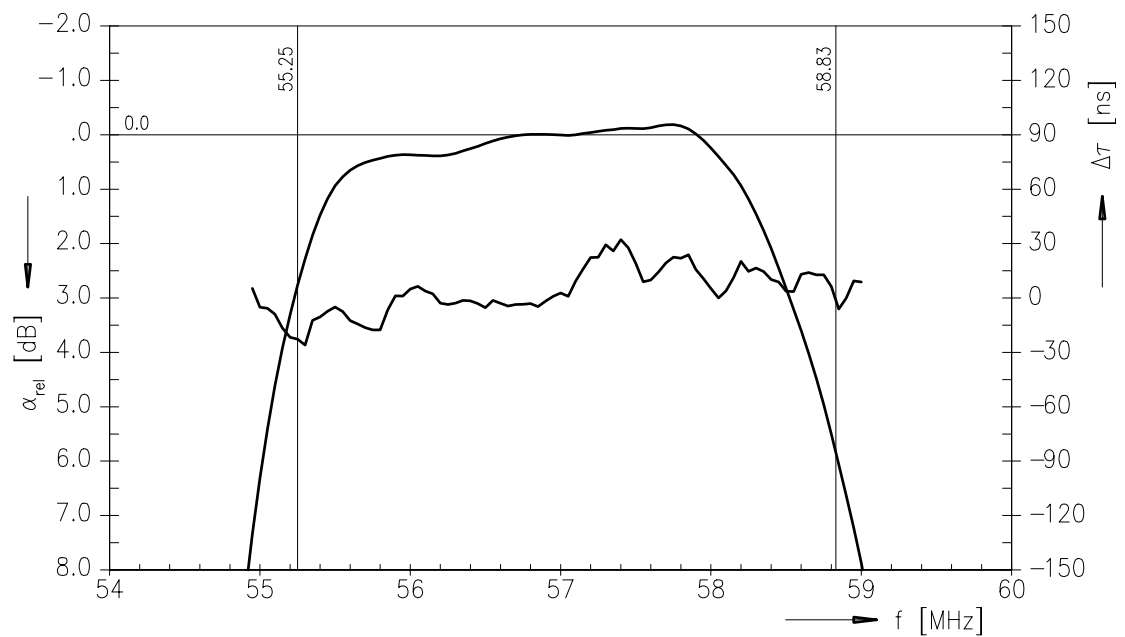
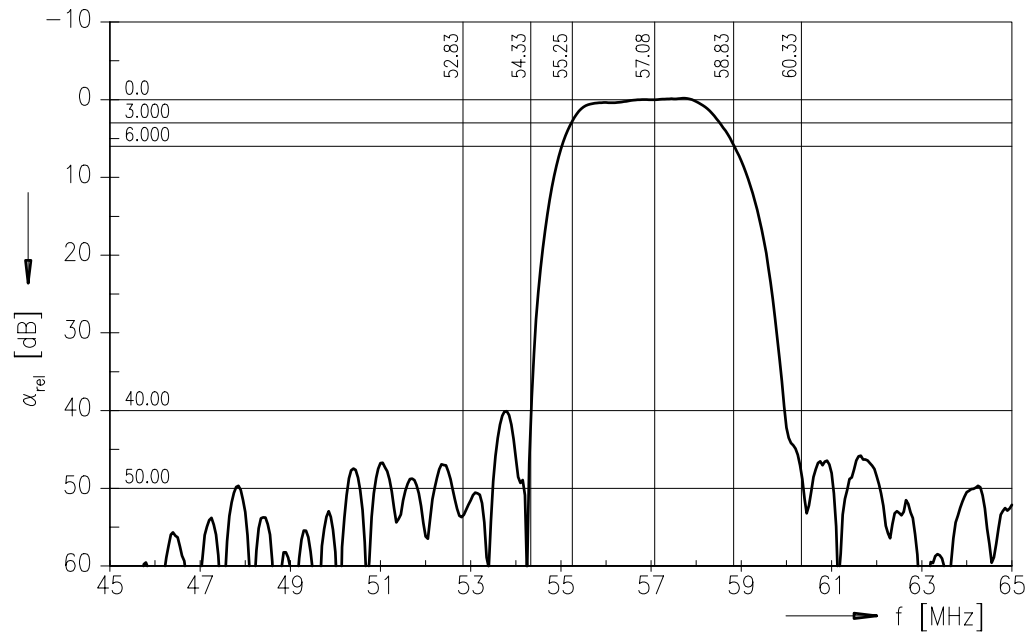
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Frequency response





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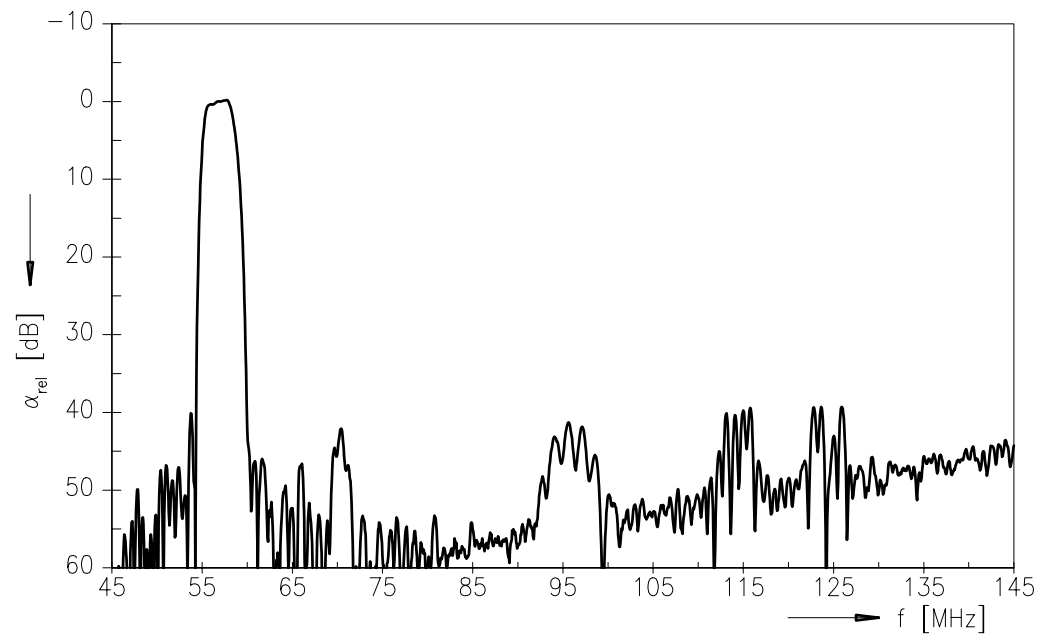
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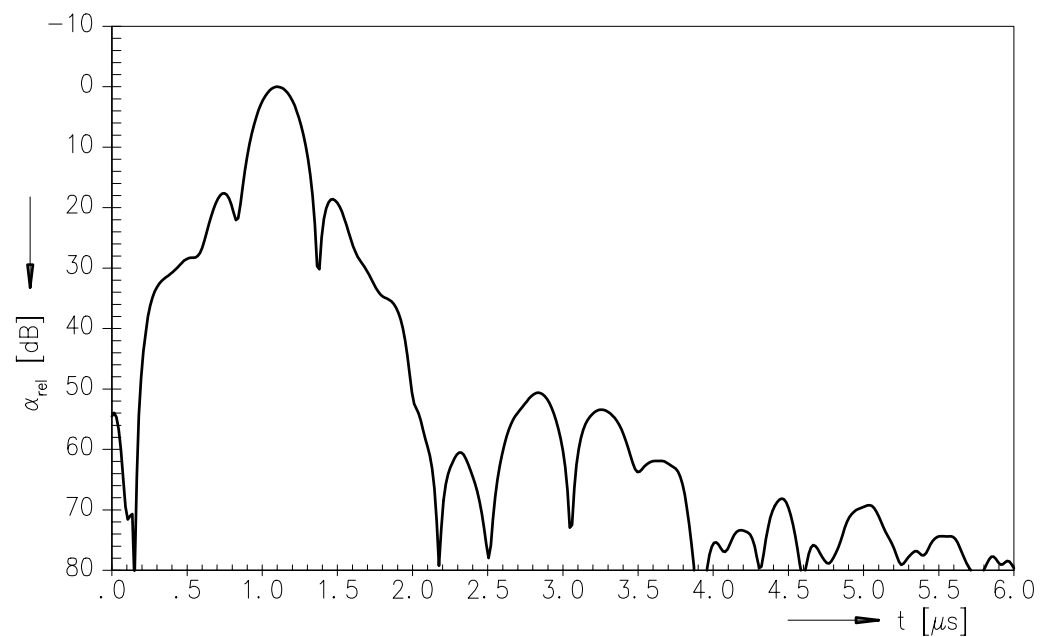
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Frequency response



Time domain response





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