



SAW Components

Data Sheet G 4960 M





SAW Components

G 4960 M

IF Filter for Video Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

- B/G

Features

- IF filter for antenna converters
- Full transmission of vestigial sideband and sound carrier
- Group delay predistortion for transmitters

Terminals

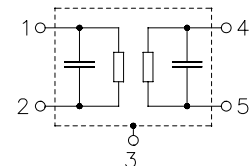
- Tinned CuFe alloy



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
G 4960 M	B39389-G4960-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

G 4960 M

IF Filter for Video Applications

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	38,90 MHz	18,1	19,6	21,1	dB
Relative attenuation	α_{rel}				
	39,65 MHz	2,7	3,9	5,1	dB
Sound carrier	33,40 MHz	-1,2	-0,2	0,8	dB
2nd sound carrier	33,15 MHz	-1,4	-0,4	0,6	dB
Adjacent picture carrier	31,90 MHz	34,0	49,0	—	dB
Adjacent sound carrier	40,40 MHz	32,0	42,0	—	dB
	44,40 MHz	40,0	49,0	—	dB
Lower sidelobe	25,00 ... 30,40 MHz	40,0	49,0	—	dB
	30,40 ... 31,90 MHz	32,0	42,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	32,0	38,0	—	dB
Reflected wave signal suppression					
1,3 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 38,90 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,4 μ s ... 1,3 μ s before main pulse (test pulse 250 ns, carrier frequency 38,90 MHz)		50,0	56,0	—	dB
Group delay predistortion	$\Delta\tau$				
(reference frequency 38,90 MHz)					
	36,90 MHz	—	95	—	ns
	34,47 MHz	—	-100	—	ns
Impedance at 38,90 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,6 \parallel 15,2	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	3,6 \parallel 3,6	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



SAW Components

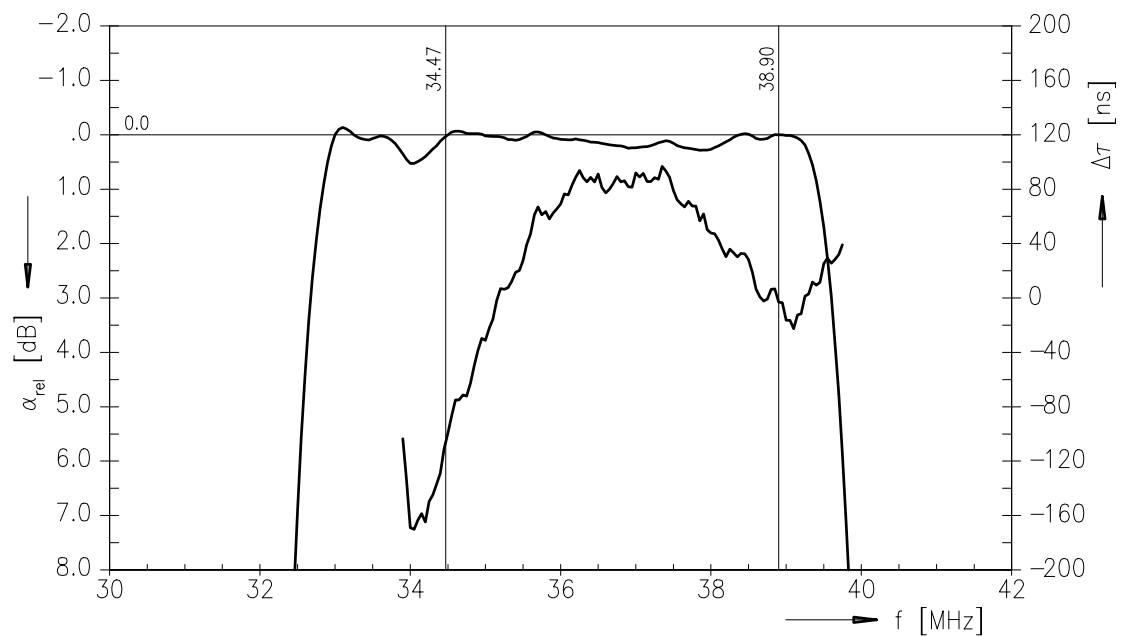
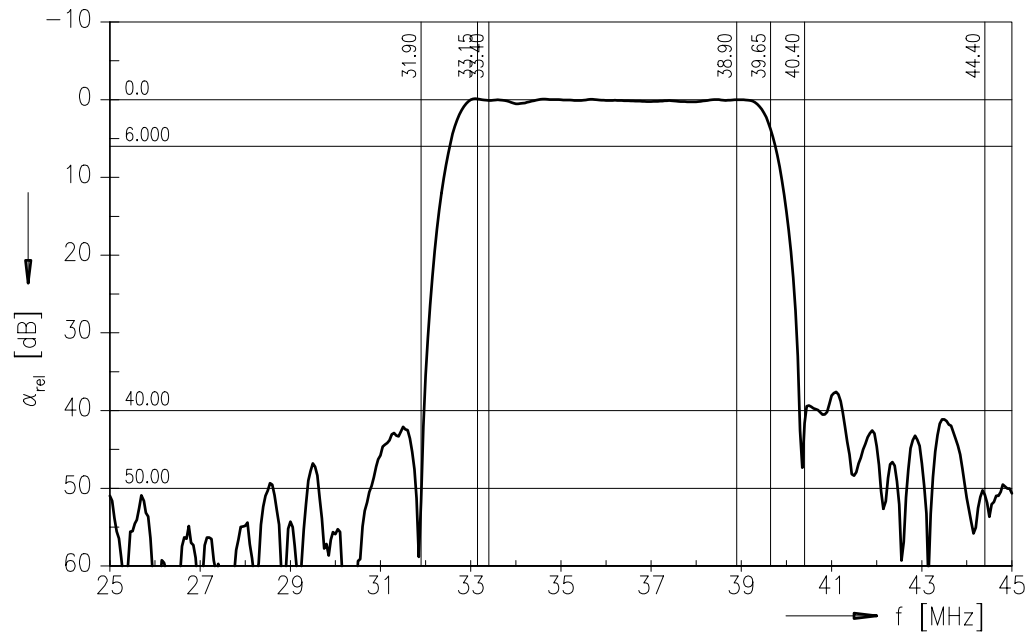
G 4960 M

IF Filter for Video Applications

38,90 MHz

Data Sheet

Frequency response





SAW Components

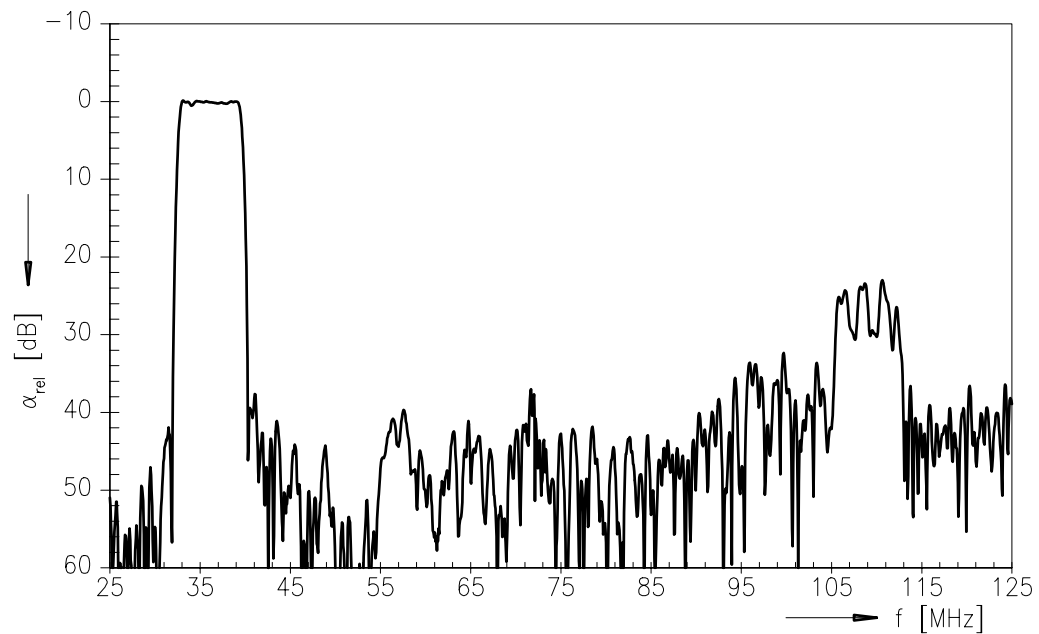
G 4960 M

IF Filter for Video Applications

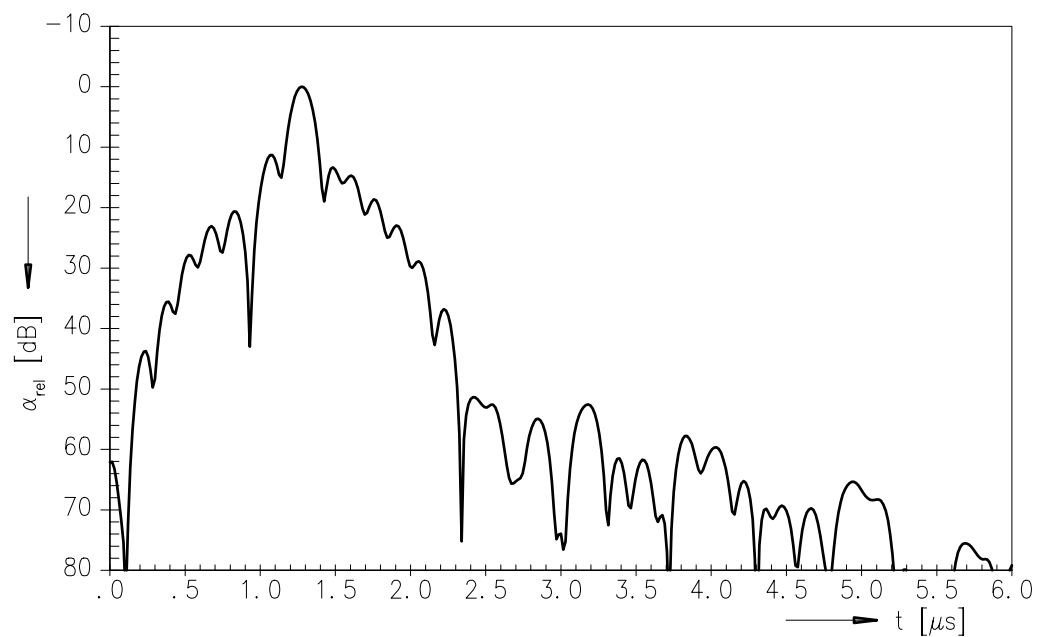
38,90 MHz

Data Sheet

Frequency response



Time domain response





SAW Components	G 4960 M
IF Filter for Video Applications	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.