

Data Sheet K 3958 M





K 3958 M

IF Filter for Video Applications

33,90 MHz and 38,90 MHz

Data Sheet

Standard

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

Features

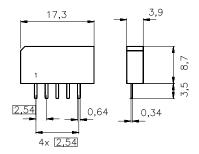
- TV IF filter with Nyquist slopes at 33.90 MHz and 38.90 MHz
- Constant group delay

Terminals

■ Tinned CuFe alloy

Plastic package SIP5K

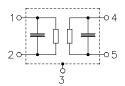




Dimensions in mm, approx. weight 1,0 g

Pin configuration

- 1 Input
- 2 Input ground
- 3 Chip carrier ground
- 4 Output
- 5 Output



| Туре | Ordering code | Marking and package according to | Packing according to | | |
|----------|-------------------|----------------------------------|----------------------|--|--|
| K 3958 M | B38389-K3958-M100 | C61157-A1-A15 | F61064-V8067-Z000 | | |

Maximum ratings

| Operable temperature range | T_{A} | -25/+65 | °C | |
|----------------------------|--------------|---------|----|-----------------------|
| Storage temperature range | $T_{ m stg}$ | -40/+85 | °C | |
| DC voltage | $V_{\rm DC}$ | 5 | V | between any terminals |
| AC voltage | $V_{\sf pp}$ | 10 | V | between any terminals |



K 3958 M

IF Filter for Video Applications

33,90 MHz and 38,90 MHz

Data Sheet

Characteristics

Reference temperature: $T_{\rm A} = 25 \ (45) \ ^{\circ}{\rm C}$ Terminating source impedance: $Z_{\rm S} = 50 \ \Omega$ Terminating load impedance: $Z_{\rm L} = 2 \ k\Omega \ || \ 3 \ {\rm pF}$

| | | | min. | typ. | max. | |
|--|-------------------|-----------------------|------|-------------|------|------------------------|
| Insertion attenuation | | α | | | | |
| Reference level for the | 37,45 (37,40) MHz | | 13,5 | 15,0 | 16,5 | dB |
| following data | | | | | | |
| Relative attenuation | | α_{rel} | | | | |
| Picture carrier | 38,95 (38,90) MHz | | 5,0 | 6,0 | 7,0 | dB |
| | 33,95 (33,90) MHz | | 4,8 | 5,8 | 6,8 | dB |
| Color carrier | 34,52 (34,47) MHz | | -0,4 | 0,6 | 1,6 | dB |
| Sound carrier | 32,45 (32,40) MHz | | _ | 57,0 | _ | dB |
| | 32,95 (32,90) MHz | | _ | 58,0 | _ | dB |
| | 33,45 (33,40) MHz | | 16,0 | 18,2 | _ | dB |
| Adjacent picture carrier | 30,95 (30,90) MHz | | 47,0 | 60,0 | _ | dB |
| | 31,95 (31,90) MHz | | 47,0 | 55,0 | _ | dB |
| Adjacent sound carrier | 40,45 (40,40) MHz | | 46,0 | 60,0 | _ | dB |
| | 40,20 (40,15) MHz | | 42,0 | 52,0 | _ | dB |
| | 40,95 (40,90) MHz | | 43,0 | 51,0 | _ | dB |
| | 41,45 (41,40) MHz | | 45,0 | 60,0 | _ | dB |
| Lower sidelobe | | | | | | |
| 25,05 31,95 | (25,00 31,90) MHz | | 42,0 | 48,0 | _ | dB |
| Upper sidelobe | | | | | | |
| 40,45 45,05 (40,40 45,00) MHz | | | 38,0 | 45,0 | _ | dB |
| Reflected wave signal sup | pression | | | | | |
| 1,2 μs 6,0 μs after main p | • | | 42,0 | 52,0 | _ | dB |
| (test pulse 250 ns, carrier frequency 37,45 MHz) | | | , | , | | |
| Feedthrough signal suppression | | | | | | |
| 1,0 μs 0,9 μs before main pulse | | | 50,0 | 56,0 | _ | dB |
| (test pulse 250 ns, carrier frequency 37,45 MHz) | | | | | | |
| Group delay ripple (p-p, aperture 50 kHz) | | | | | | |
| 33,95 38,95 (33,90 38,90) MHz | | | _ | 40 | _ | ns |
| Impedance at 37,45 MHz | | | | | | |
| Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ | | | _ | 2,2 10,8 | _ | $k\Omega \parallel pF$ |
| Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | | | _ | 1,9 3,9 | _ | kΩ pF |
| Temperature coefficient of | f frequency | TC _f | _ | -72 | _ | ppm/K |



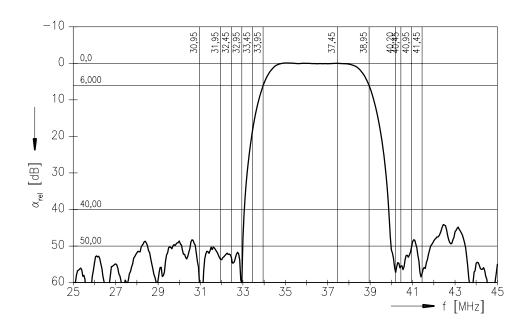
K 3958 M

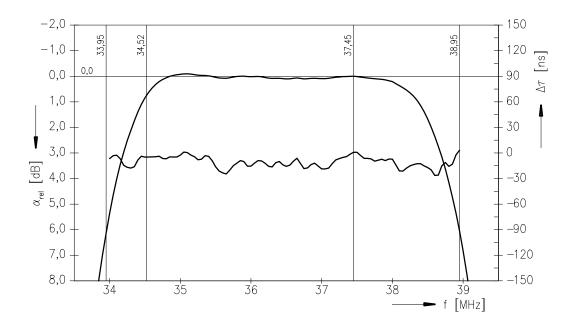
IF Filter for Video Applications

33,90 MHz and 38,90 MHz

Data Sheet

Frequency response







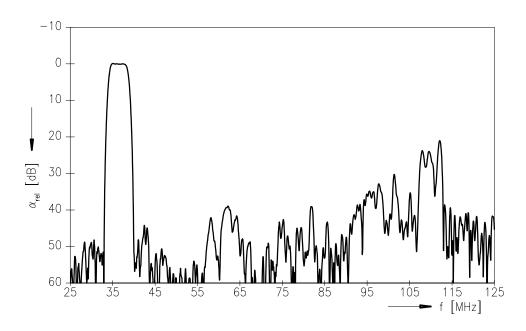
K 3958 M

IF Filter for Video Applications

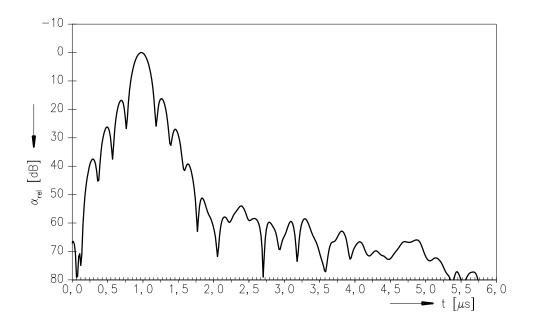
33,90 MHz and 38,90 MHz

Data Sheet

Frequency response



Time domain response





K 3958 M

IF Filter for Video Applications

33,90 MHz and 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.