

Data Sheet G 1961 M





G 1961 M

IF Filter for Intercarrier Applications

38,90 MHz

Plastic package SIP5K

Data Sheet

Standard

■ B/G

Features

- TV IF filter with Nyquist slope and sound shelf
- Reduced group delay predistortion as compared with standard B/G, half
- Suitable for CENELEC EN 55020

17,3 3,9 10,64 4x [2,54]

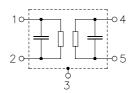
Terminals

■ 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



| Туре | Ordering code | Marking and package according to | Packing according to | | |
|----------|-------------------|----------------------------------|----------------------|--|--|
| G 1961 M | B39389-G1961-M100 | C61157-A1-A15 | F61074-V8067-Z000 | | |

Maximum ratings

| Operable temperature range | T_{A} | -25/+65 | °C | |
|----------------------------|--------------|---------|----|-----------------------|
| Storage temperature range | $T_{ m stg}$ | -40/+85 | °C | |
| DC voltage | V_{DC} | 12 | V | between any terminals |
| AC voltage | $V_{\sf pp}$ | 10 | V | between any terminals |



SAW Components G 1961 M

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Characteristics

 $T_{A} = 25 \,^{\circ}\text{C}$ $Z_{S} = 50 \,\Omega$ $Z_{L} = 2 \,\text{k}\Omega \parallel 3 \,\text{pF}$ Reference temperature: Terminating source impedance:

Terminating load impedance:

| | | min. | typ. | max. | |
|---|-----------------|------|-------------|------|-----------------------|
| Insertion attenuation | α | | | | |
| Reference level for the 37,40 MHz | | 13,6 | 15,1 | 16,6 | dB |
| following data | | | | | |
| Relative attenuation | $lpha_{ m rel}$ | | | | |
| Picture carrier 38,90 MHz | | 5,6 | 6,6 | 7,6 | dB |
| Color carrier 34,47 MHz | | 2,3 | 3,3 | 4,3 | dB |
| Sound carrier 33,40 MHz | | 19,3 | 20,3 | 21,3 | dB |
| Adjacent picture carrier UHF 30,90 MHz | | 46,0 | 58,0 | _ | dB |
| VHF 31,90 MHz | | 48,0 | 64,0 | _ | dB |
| 32,40 MHz | | 50,0 | 65,0 | _ | dB |
| 40,15 MHz | | 40,0 | 49,0 | _ | dB |
| Adjacent sound carrier VHF 40,40 MHz | | 46,0 | 59,0 | _ | dB |
| UHF 41,40 MHz | | 42,0 | 53,0 | _ | dB |
| Lower sidelobe 25,00 32,40 MHz | | 37,0 | 46,0 | _ | dB |
| Upper sidelobe 40,40 45,00 MHz | | 36,0 | 44,0 | _ | dB |
| Reflected wave signal suppression | | | | | |
| 1,3 μs 6,0 μs after main pulse | | 44,0 | 54,0 | _ | dB |
| (test pulse 250 ns, | | ,0 | 0 .,0 | | |
| carrier frequency 37,40 MHz) | | | | | |
| | | | | | |
| Feedthrough signal suppression | | | | | |
| 1,2 μs 1,1 μs before main pulse | | 50,0 | 56,0 | _ | dB |
| (test pulse 250 ns, | | | | | |
| carrier frequency 37,40 MHz) | | | | | |
| Group delay predistortion | Δτ | | | | |
| (reference frequency 38,90 MHz) | | | | | |
| 36,90 MHz | | _ | -90 | _ | ns |
| 34,47 MHz | | _ | 95 | _ | ns |
| Impedance at 37,40 MHz | | | | | |
| Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ | | _ | 1,7 13,0 | _ | $k\Omega \mid\mid pF$ |
| Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | | _ | 1,4 4,6 | _ | kΩ pF |
| Temperature coefficient of frequency | TC_{f} | _ | -72 | _ | ppm/K |



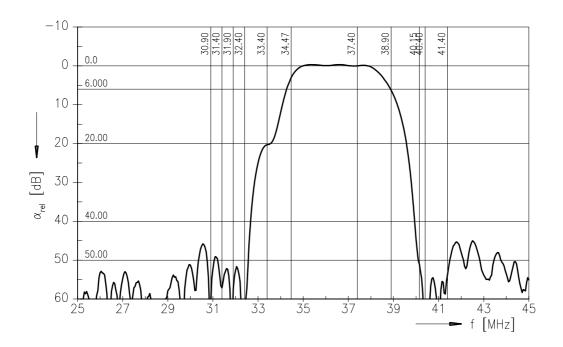
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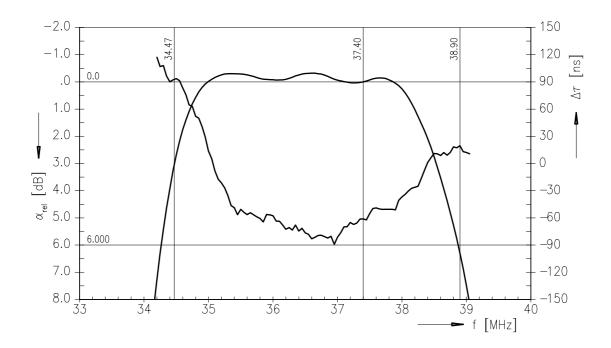
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Frequency response







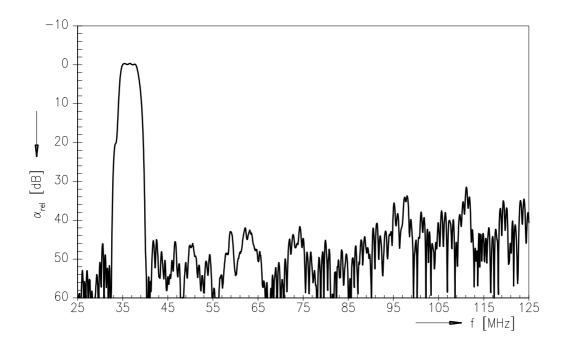
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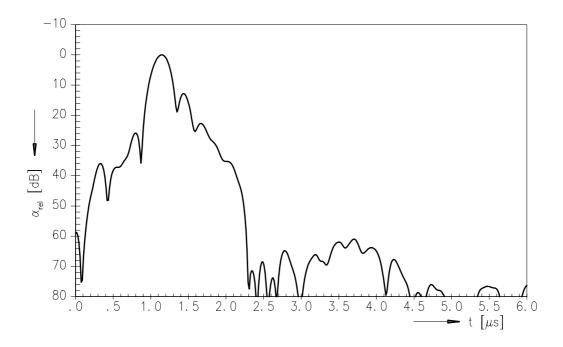
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Frequency response



Time domain response





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