



SAW Filters for Multimedia Applications

Series/Type: **G3956M**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39389G3956M100		2010-10-08	2011-03-30	2011-06-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

SAW Components
G 3956 M
IF Filter for Video Applications
38,90 MHz
Data Sheet
Standard

 Plastic package **SIP5K**

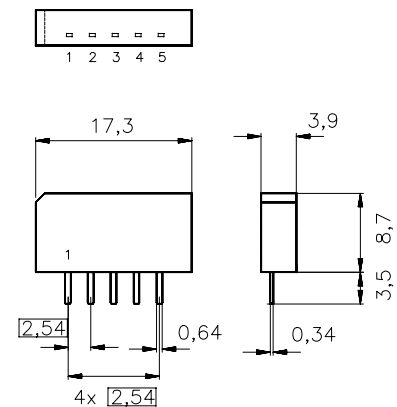
- B/G

Features

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

Terminals

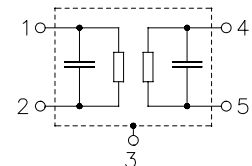
- Tinned CuFe alloy



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 3956 M	B39389-G3956-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

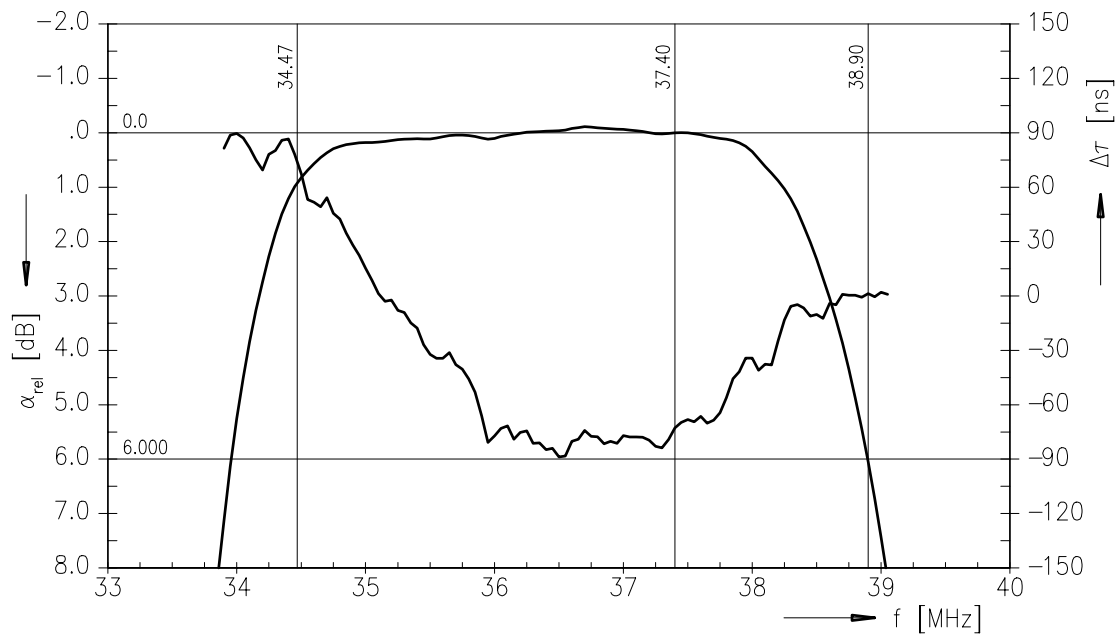
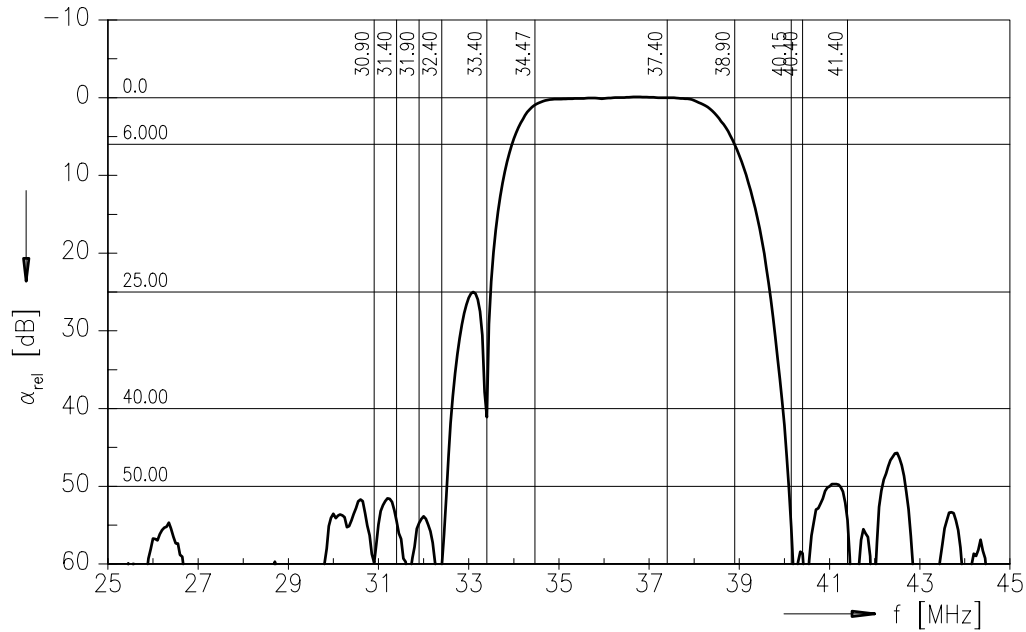
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Characteristics

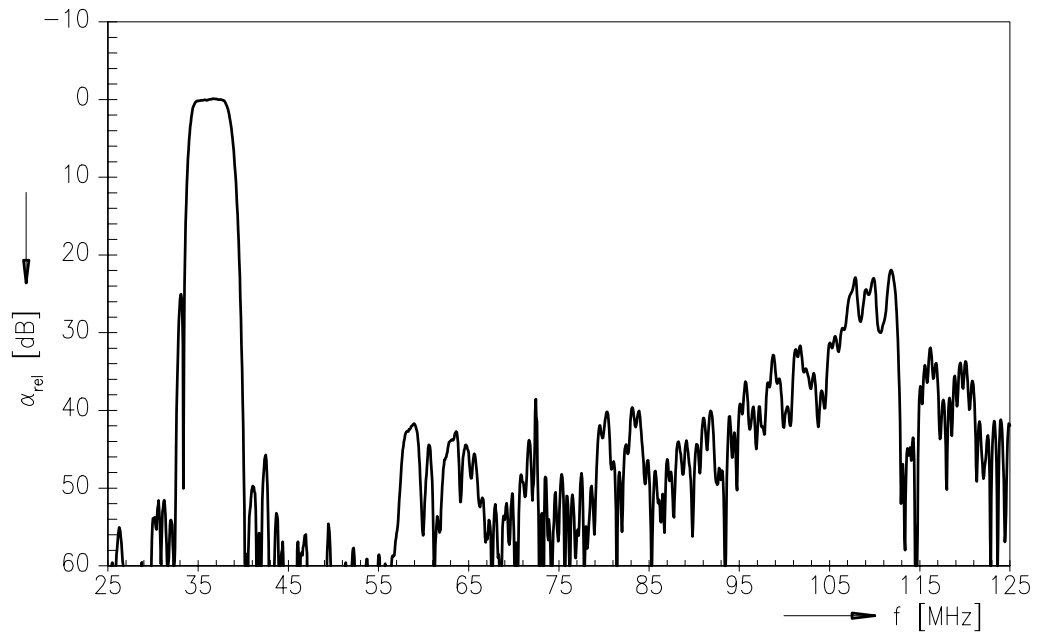
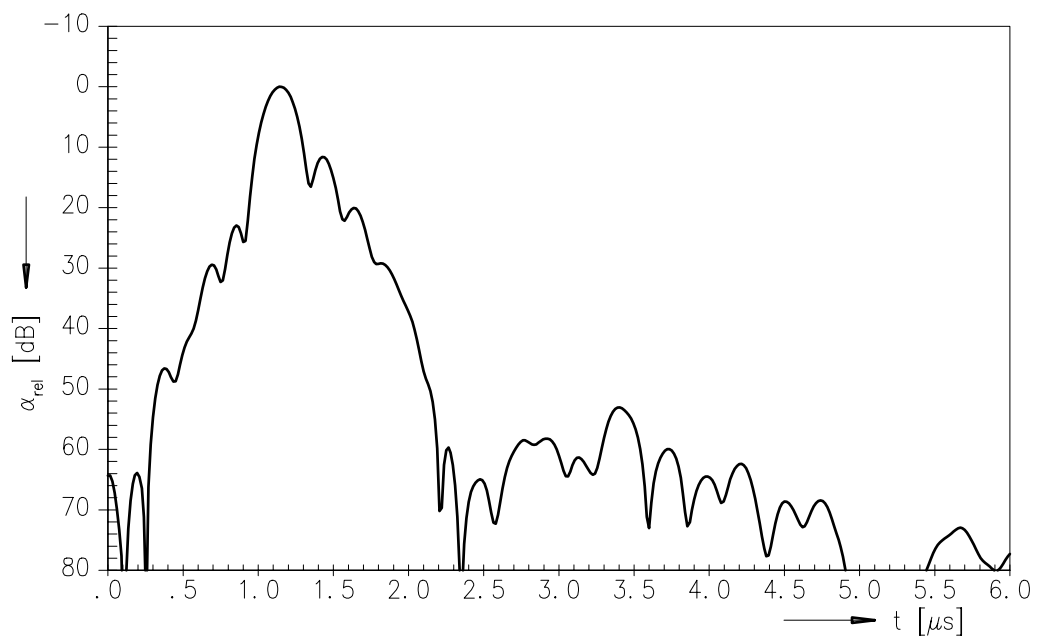
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	37,40 MHz	12,2	13,7	15,2	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,90 MHz	5,1	6,1	7,1	dB
Color carrier	34,47 MHz	0,0	1,0	2,0	dB
Sound carrier	33,40 MHz	26,0	39,0	—	dB
	33,15 MHz	—	25,0	—	dB
	33,90 MHz	—	7,0	—	dB
Adjacent picture carrier UHF	30,90 MHz	48,0	58,0	—	dB
	VHF				
	31,90 MHz	48,0	56,0	—	dB
	31,40 MHz	44,0	52,0	—	dB
Adjacent sound carrier VHF	32,40 MHz	48,0	60,0	—	dB
	40,15 MHz	42,0	51,0	—	dB
	40,40 MHz	45,0	57,0	—	dB
Adjacent sound carrier UHF	41,40 MHz	44,0	57,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	42,0	49,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	40,0	46,0	—	dB
Reflected wave signal suppression					
1,3 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,0 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
Group delay predistortion					
(reference frequency 38,90 MHz)					
	$\Delta\tau$				
	36,90 MHz	—	-85	—	ns
	34,47 MHz	—	70	—	ns
Impedance at 37,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,3 \parallel 16,6	—	k Ω \parallel pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,4 \parallel 4,5	—	k Ω \parallel pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K

Data Sheet

Frequency response



Data Sheet
Frequency response

Time domain response


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38,90 MHz

Data Sheet

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P.O. Box 80 17 09, D-81617 München

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