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# SAW Components

Data Sheet G 3963 M





## SAW Components G 3963 M IF Filter for Video Applications 38,90 MHz

**Data Sheet** 

#### Standard

■ B/G

#### **Features**

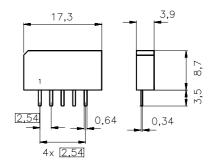
- TV IF filter with Nyquist slope and sound suppression
- Constant group delay
- Suitable for CENELEC EN 55020

#### **Terminals**

■ Tinned CuFe alloy

#### Plastic package SIP5K

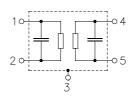




Dimensions in mm, approx. weight 1,0 g

#### 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		
G 3963 M	B39389-G3963-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	$V_{DC}$	5	V	between any terminals
AC voltage	$V_{\sf pp}$	10	V	between any terminals



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#### **IF Filter for Video Applications**

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Characteristics

 $\begin{array}{ll} \text{Reference temperature:} & T_{\text{A}} &= 25 \, ^{\circ}\text{C} \\ \text{Terminating source impedance:} & Z_{\text{S}} &= 50 \, \Omega \\ \text{Terminating load impedance:} & Z_{\text{L}} &= 2 \, \text{k}\Omega \, || \, 3 \, \text{pF} \end{array}$ 

					min.	typ.	max.	
Insertion attenuation				α				
Reference level for the		37,40	MHz		13,0	14,5	16,0	dB
following data								
Relative attenuation				$lpha_{\text{rel}}$				
Picture carrier		38,90	MHz		4,6	5,6	6,6	dB
Color carrier		34,47	MHz		1,7	2,7	3,7	dB
Sound carrier		33,40	MHz		42,0	56,0	_	dB
		32,40	MHz		46,0	56,0	_	dB
Adjacent picture carrier	UHF	30,90	MHz		46,0	58,0	_	dB
	VHF	31,90	MHz		46,0	57,0	_	dB
		40,15	MHz		38,0	45,0	_	dB
Adjacent sound carrier	VHF	40,40	MHz		45,0	55,0	_	dB
	UHF	41,40	MHz		44,0	51,0	_	dB
Lower sidelobe	25,00	31,90	MHz		42,0	47,0	_	dB
Upper sidelobe	40,40	45,00	MHz		38,0	43,0	_	dB
Reflected wave signal	suppression	on						
1,1 μs 6,0 μs after ma	in pulse				44,0	54,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40	MHz)							
Feedthrough signal su	ppression							
1,2 μs 1,05 μs before main pulse					50,0	56,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40	MHz)							
Group delay ripple (p-p	<b>o</b> )			$\Delta  au$	_	50	_	ns
Impedance at 37,40 MH								
Input:	$Z_{IN} = R_{I}$	$_{N} \mid \mid C_{I}$	N		_	1,7    14,1	_	$k\Omega \parallel pF$
Output	$Z_{OUT} = R_0$	$C_{\text{OUT}} \parallel C_{0}$	TUC		_	1,3    5,5		kΩ    pF
Temperature coefficient of frequency			$TC_{f}$	_	-72	_	ppm/K	



SAW Components

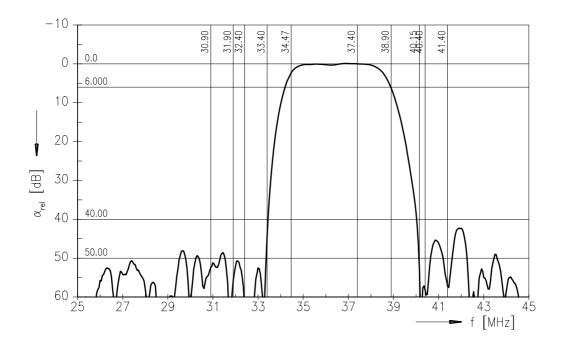
G 3963 M

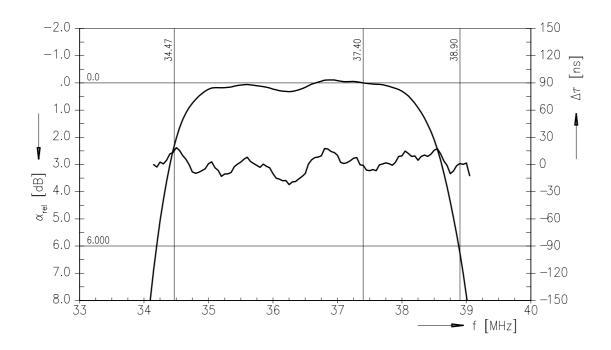
IF Filter for Video Applications

38,90 MHz

**Data Sheet** 

#### Frequency response







SAW Components

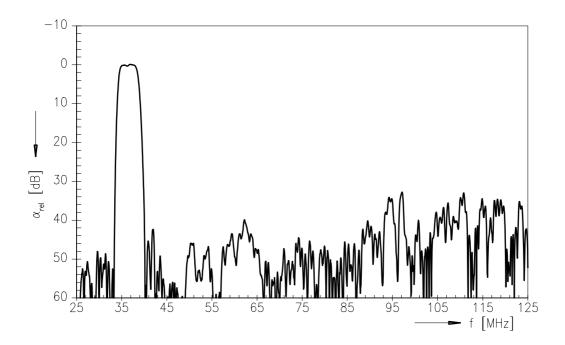
G 3963 M

#### **IF Filter for Video Applications**

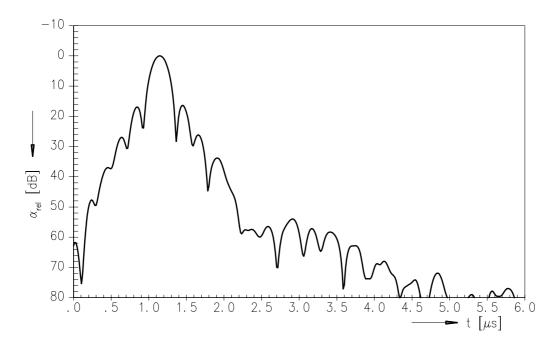
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**Data Sheet** 

#### Frequency response



#### Time domain response





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**IF Filter for Video Applications** 

38,90 MHz

**Data Sheet** 

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