

# SAW Components

Data Sheet M 3951 M





SAW Components	M 3951 M
IF Filter for Video Applications	45,75 MHz

**Data Sheet** 

#### Standard

■ M/N

#### **Features**

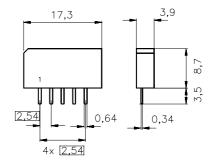
- TV IF filter with Nyquist slope and sound suppression
- Customized group delay predistortion
- Suitable for FCC EIA / IS-31

#### **Terminals**

■ Tinned CuFe alloy

# Plastic package SIP5K

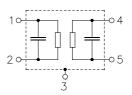




Dimensions in mm, approx. weight 1,0 g

### 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		
M 3951 M	B39458-M3951-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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## Characteristics

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

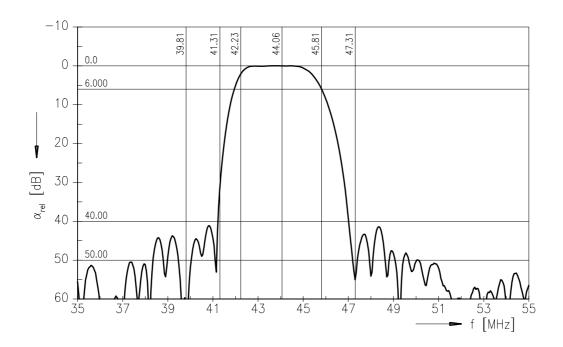
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the	44,06 (44,00) MHz		10,5	12,0	13,5	dB
following data						
Relative attenuation		$lpha_{rel}$				
Picture carrier	45,81 (45,75) MHz		4,9	5,9	6,9	dB
Color carrier	42,23 (42,17) MHz		1,2	2,2	3,2	dB
Sound carrier	41,31 (41,25) MHz		25,0	32,0	_	dB
Adjacent picture carrier	39,81 (39,75) MHz		48,0	61,0	_	dB
Adjacent sound carrier	47,31 (47,25) MHz		46,0	56,0	_	dB
Lower sidelobe	, ,					
35,06 39,81	(35,00 39,75) MHz		38,0	42,0	_	dB
Upper sidelobe						
47,31 55,06	(47,25 55,00) MHz		36,0	41,0	_	dB
Reflected wave signal su	ppression					
1,1 μs 6,0 μs after main	pulse		42,0	52,0	_	dB
(test pulse 250 ns,						
carrier frequency 44,06 MH	łz)					
Feedthrough signal supp	ression					
1,2 μs 1,1 μs before mai	n pulse		50,0	56,0	_	dB
(test pulse 250 ns,						
carrier frequency 44,06 MH	łz)					
Group delay predistortion	n	$\Delta  au$				
(reference frequency: 45,8	1 MHz)					
	42,81 (42,75) MHz		_	-10	_	ns
	42,23 (42,17) MHz		_	-40	_	ns
Group delay ripple (p-p)		Δτ	_	40	_	ns
Impedance at 44,06 MHz						
	$  = R_{\rm IN}   C_{\rm IN}$		_	1,4    10,8	—	k $\Omega \parallel$ pF
Output: Z	$C_{OUT} = R_{OUT}    C_{OUT}$		_	0,9    4,4	_	k $\Omega \parallel pF$
Temperature coefficient of	of frequency	$TC_{f}$	_	-72	_	ppm/K

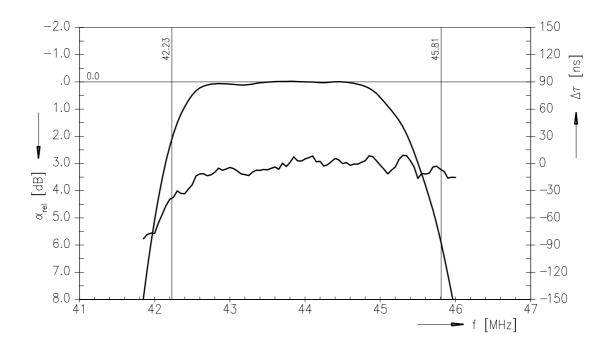


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### Frequency response



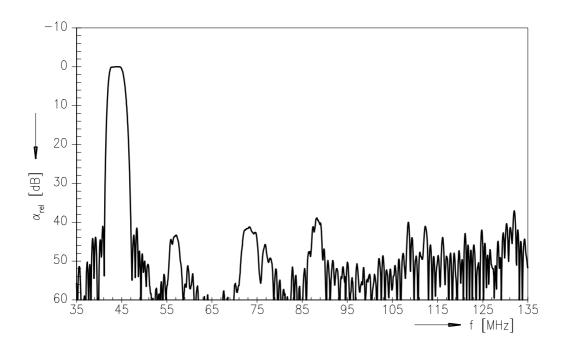




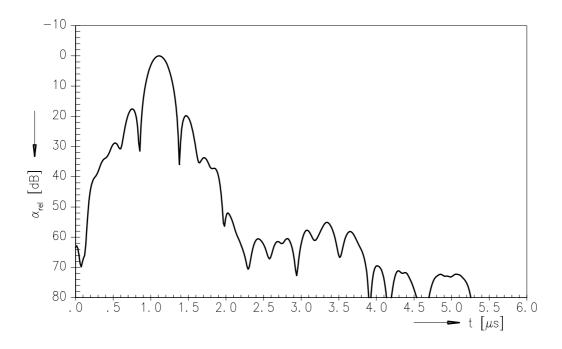
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### Frequency response



### Time domain response





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