

Data Sheet K 3958 M





## SAW Components 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**

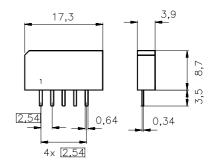
- TV IF filter with Nyquist slopes at 33.90 MHz and 38.90 MHz
- Constant group delay

#### **Terminals**

■ Tinned CuFe alloy

#### Plastic package SIP5K

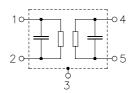




Dimensions in mm, approx. weight 1,0 g

## 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	$V_{DC}$	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 following data	37,45 (37,40) MHz		13,5	15,0	16,5	dB
Relative attenuation		$\alpha_{rel}$				
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 su	ppression					
1,2 μs 6,0 μs after main	pulse		42,0	52,0	_	dB
(test pulse 250 ns, carrier frequency 37,45 MHz)						
Feedthrough signal supp	ression					
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)				40		
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	$C_{\text{OUT}} = R_{\text{OUT}}    C_{\text{OUT}}$		_	1,9    3,9	_	k $\Omega$    pF
Temperature coefficient of frequency			_	-72	_	ppm/K



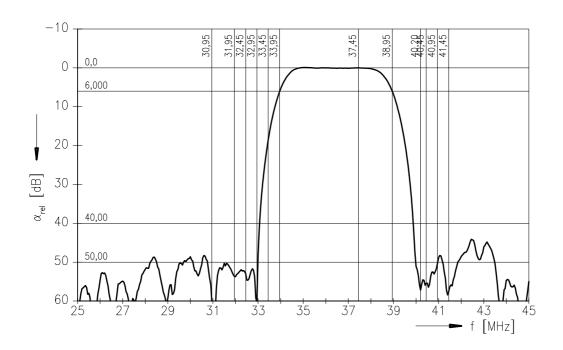
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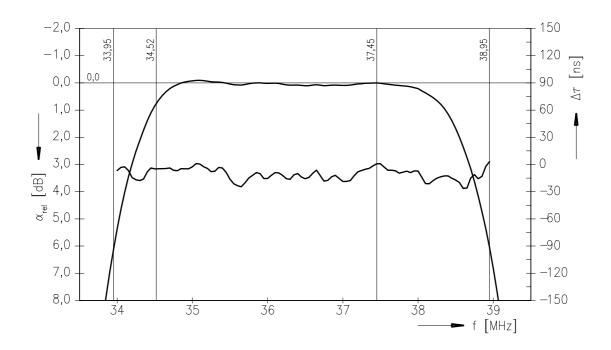
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#### Frequency response







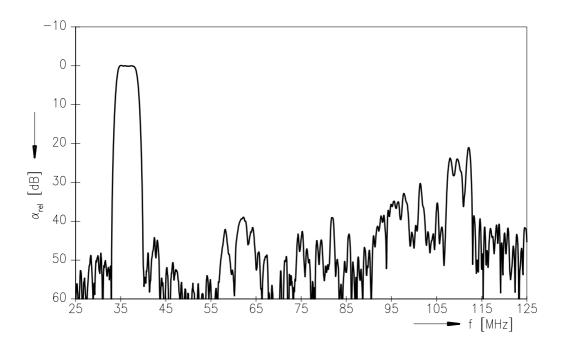
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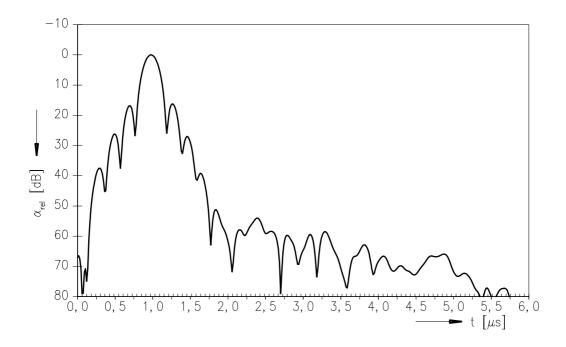
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#### Frequency response



## Time domain response





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