



SAW Components K 3562 M

IF Filter for Quasi/Split Sound Applications

38,00 MHz

Plastic package SIP5K

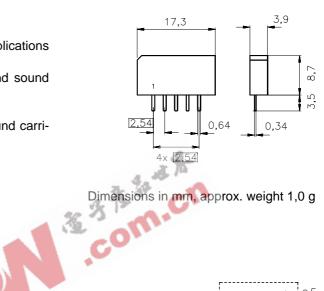
Data Sheet

Standard

- B/G
- D/K
- = 1

Features

- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression, symmetrical output
- Customized group delay predistortion
- Sound channel with pass band for sound carriers between 31,5 MHz and 32,5 MHz

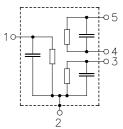


Terminals

■ Tinned CuFe alloy

Pin configuration

- Input 1
- 2 Chip carrier - ground
- Output sound 3
- 4 Output - picture
- 5 Output - picture



		Marking and package according to	Packing according to
K 3562 M	B39380-K3562-M201	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operating temperature range	T_{A}	-25/+65	°C	
Storage temperature range	$T_{ m stg}$	-40/+85	°C	
DC voltage	$V_{\rm DC}$	5	V	between any terminals
AC voltage	$V_{\sf pp}$	10	V	between any terminals



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Characteristics of picture channel

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

					min.	typ.	max.	
Insertion attenuation				α				
Reference level for the		36,50	MHz		14,3	15,8	17,3	dB
following data								
Relative attenuation				α_{rel}				
Picture carrier		38,00	MHz		5,2	6,2	7,2	dB
Color carrier		33,57	MHz		0,3	1,3	2,3	dB
Sound carrier		31,50	MHz		30,0	39,0	_	dB
		32,50	MHz		25,0	32,0	_	dB
Adjacent picture carrier		30,00	MHz		36,0	46,0	_	dB
		31,00	MHz	30	30,0	44,0	_	dB
Adjacent sound carrier		39,50		1 CH	35,0	42,0	_	dB
		40,00	MHz		35,0	43,0	_	dB
Lower sidelobe	25,00	30,00	MHz		38,0	44,0	_	dB
Upper sidelobe	40,00	45,00	MHz		37,0	43,0	_	dB
Reflected wave signal suppression 1,2 μs 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz) Feedthrough signal suppression 1,2 μs 1,1 μs before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)					42,0 50,0	50,0 56,0	_ _	dB dB
Group delay predistort				$\Delta \tau$				
(reference frequency 38,	,00 MHz)							
		35,00			_	-4 0	_	ns
		34,50			_	- 60	_	ns
		34,00			_	- 95	_	ns
		33,50	MHZ		_	-130	_	ns
Impedance at 36,50 MH	·lz							
Input:	$Z_{\rm IN} = R_{\rm IN}$	C ₁	N		_	1,4 20,8	_	k $\Omega \parallel$ pF
Output:	$Z_{\text{OUT}} = R_{\text{O}}$	$_{UT} \parallel C_{C}$	DUT		_	2,2 3,7	_	kΩ pF
Temperature coefficient of frequency				TC _f	_	-72	_	ppm/K



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Characteristics of sound channel

Reference temperature: $T_{\rm A}=25\,^{\circ}{\rm C}$ 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 31,50 MHz			12,3	13,8	15,3	dB	
following data							
Relative attenuation			α_{rel}				
Sound carrier	32,50	MHz		0,8	1,8	2,8	dB
Picture carrier	38,00	MHz		35,0	45,0	_	dB
Color carrier	33,57	MHz		16,0	20,0	_	dB
Adjacent picture carrier	30,00	MHz		26,0	32,0	_	dB
	31,00	MHz		23	3,0	_	dB
Adjacent sound carrier	39,50	MHz	1 %	36,0	46,0	_	dB
	40,00	MHz	1.30	36,0	48,0	_	dB
Lower sidelobe	25,00 30,00	MHz		26,0	32,0	_	dB
Upper sidelobe	38,00 45,00	MHz	3	32,0	38,0	_	dB
Impedance at 31,50 MH							
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				_	3,5 3,3	_	kΩ pF
Temperature coefficient of frequency				_	-72	_	ppm/K



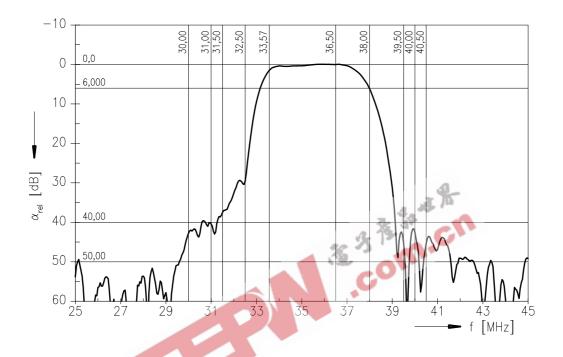
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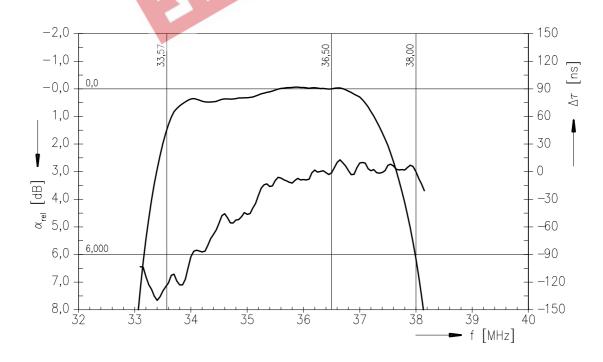
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Frequency response of picture channel







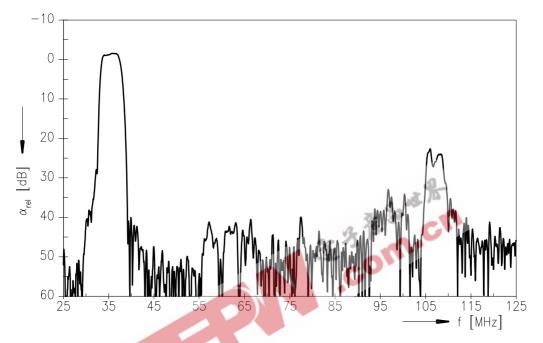
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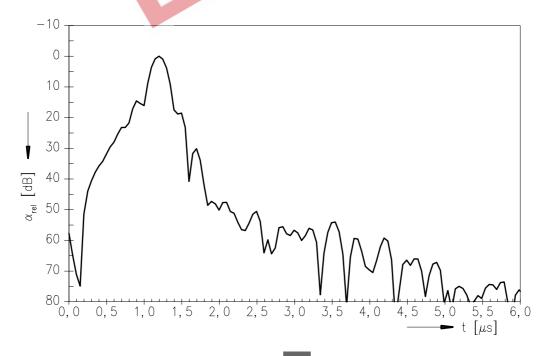
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Frequency response of picture channel



Time domain response of picture channel





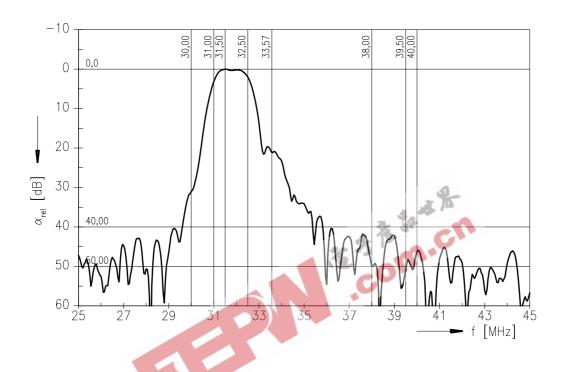
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Frequency response of sound channel





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