

SAW Components	K 7252 M
IF Filter for Intercarrier / Multistandard Applications	38,90 MHz

Data Sheet

Standard

- B/G
- D/K
- M/N

Features

- TV IF filter switchable from B/G, D/K mode to M/N mode
- B/G, D/K mode with Nyquist slope and broad sound shelf for sound carriers at 32,40 MHz and 33.40 MHz
- Reduced group delay predistortion as compared to standard B/G half
- M/N mode with Nyquist slope and sound shelf at 34,40 MHz
- Constant group delay

2.54 0.64 0.34

Plastic package SIP5K

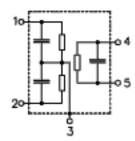
Dimensions in mm, approx. weight 1,0 g

Terminals

■ Tinned CuFe alloy

Pin configuration

- 1 Input
- 2 Switching input
- 3 Chip carrier ground
- 4 Output
- 5 Output



Туре	Ordering code		Packing according to
K 7252 M	B39389-K7252-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operable temperature range	T _A	-25/+65	,C	
Storage temperature range	$T_{\rm stg}$	-40/+85	'C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals



SAW Components K 7252 M

IF Filter for Intercarrier / Multistandard Applications

38,90 MHz

Data Sheet

Characteristics in B/G, D/K mode (switching pin 2 connected to ground)

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		37,40	MHz		15,4	16,9	18,4	dB
following data								
Relative attenuation				α_{rel}				
Picture carrier		38,90	MHz		4,6	5,6	6,6	dB
Color carrier		34,47	MHz		0,2	1,2	2,2	dB
Sound carrier		32,40	MHz		17,7	19,2	20,7	dB
		33,40	MHz		16,0	17,5	_	dB
Adjacent picture carrier		30,90	MHz		46,0	58,0	_	dB
		31,90	MHz		38,0	50,0	_	dB
Adjacent sound carrier		40,40	MHz		41,0	50,0	_	dB
		41,40	MHz		40,0	46,0	_	dB
Lower sidelobe	25,00	30,90	MHz		36,0	42,0	_	dB
Upper sidelobe	40,40	45,00	MHz		33,0	39,0	_	dB
Reflected wave signal s	suppression	on						
1,3 μs 6,0 μs after mai	n pulse				42,0	50,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40 N	ИHz)							
Feedthrough signal sup	pression							
1,2 μs 1,1 μs before m	ain pulse				_	56,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40 N	ИHz)							
Group delay predistorti	on			Δτ				
(reference frequency 38,	90 MHz)							
		36,80	MHz		_	-40	_	ns
		34,47	MHz			50	_	ns
Impedance at 37,40 MHz								
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				_	1,0 17,3	_	$k\Omega \parallel pF$	
Output:	$Z_{\text{OUT}} = R_{\text{C}}$	$_{OUT} \parallel C_{O}$	DUT		<u> </u>	2,7 3,4	<u> </u>	$k\Omega \parallel pF$
Temperature coefficient of frequency			TC_{f}		-72		ppm/K	



K 7252 M

IF Filter for Intercarrier / Multistandard Applications

38,90 MHz

Data Sheet

Characteristics in M/N mode (switching pin 2 connected to pin 1)

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	37,4	0 MHz		15,5	17,0	18,5	dB
following data							
Relative attenuation			α_{rel}				
Picture carrier	38,9	0 MHz		4,9	5,9	6,9	dB
Color carrier	35,3	2 MHz		0,8	1,8	2,8	dB
Sound carrier	34,4	0 MHz		17,0	18,5	20,0	dB
Adjacent picture carrier	32,9	0 MHz		40,0	52,0	_	dB
Adjacent sound carrier	40,4	0 MHz		41,0	49,0	<u> </u>	dB
Lower sidelobe	25,00 32,9	0 MHz		36,0	42,0	_	dB
Upper sidelobe	40,40 45,0	0 MHz		31,0	37,0	_	dB
Reflected wave signal suppression							
1,2 μs 6,0 μs after ma	ain pulse			42,0	52,0	_	dB
(test pulse 250 ns,							
carrier frequency 37,40	MHz)						
Feedthrough signal su							
1,2 μs 1,1 μs before main pulse				_	50,0	<u> </u>	dB
(test pulse 250 ns,							
carrier frequency 37,40	MHz)						
Group delay ripple (p-p	p)		Δau	_	50	_	ns
Impedance at 37,40 MHz							
Input:	$Z_{IN} = R_{IN} \parallel$	C_{IN}		_	1,1 21,0	_	kΩ pF
·	$Z_{\text{OUT}} = R_{\text{OUT}} \parallel$			_	2,7 3,4	<u> </u>	kΩ pF
Temperature coefficient of frequency			TC_{f}	_	-72	_	ppm/K



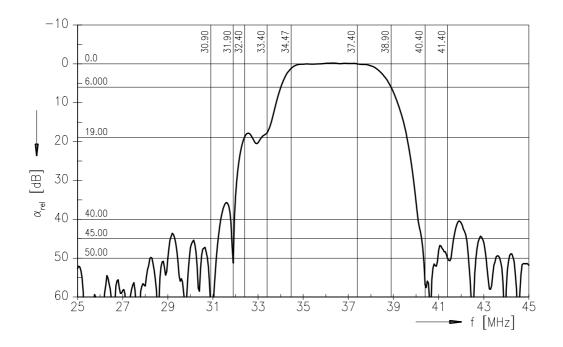
K 7252 M

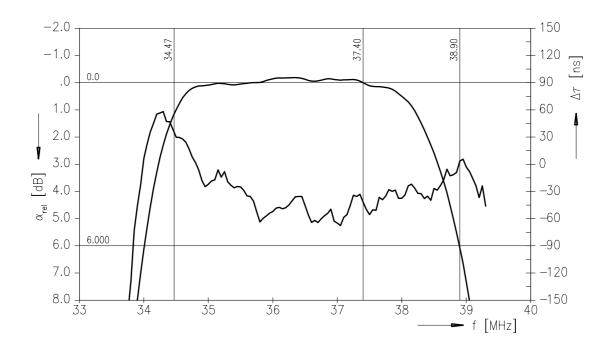
IF Filter for Intercarrier / Multistandard Applications

38,90 MHz

Data Sheet

Frequency response B/G, D/K mode







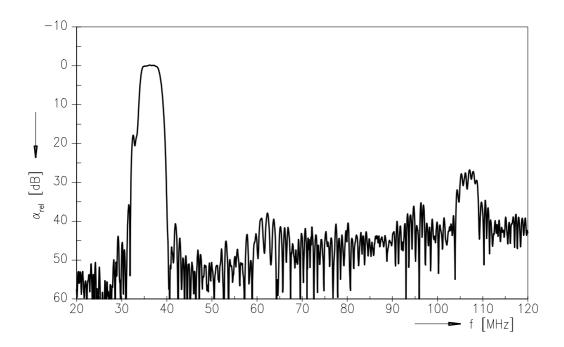
K 7252 M

IF Filter for Intercarrier / Multistandard Applications

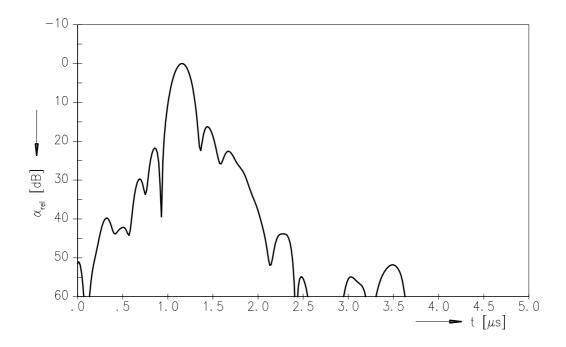
38,90 MHz

Data Sheet

Frequency response B/G, D/K mode



Time domain response B/G, D/K mode





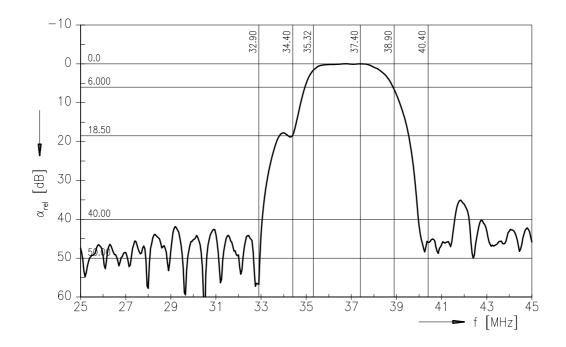
K 7252 M

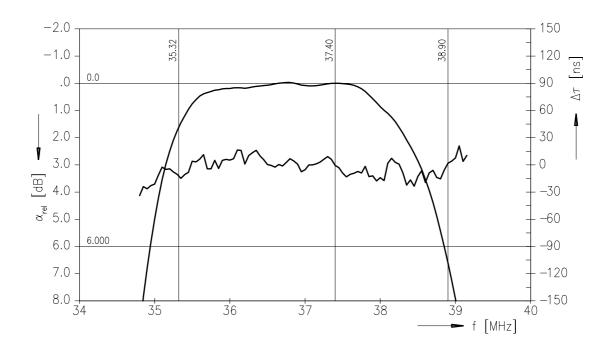
IF Filter for Intercarrier / Multistandard Applications

38,90 MHz

Data Sheet

Frequency response M/N mode







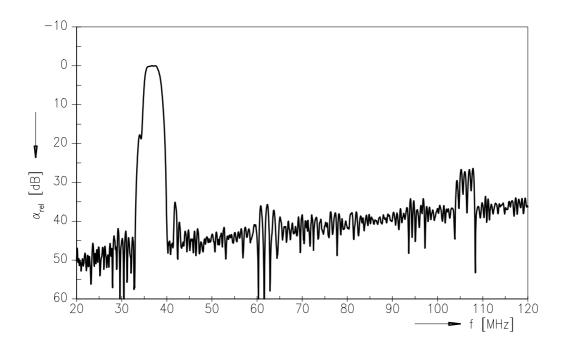
K 7252 M

IF Filter for Intercarrier / Multistandard Applications

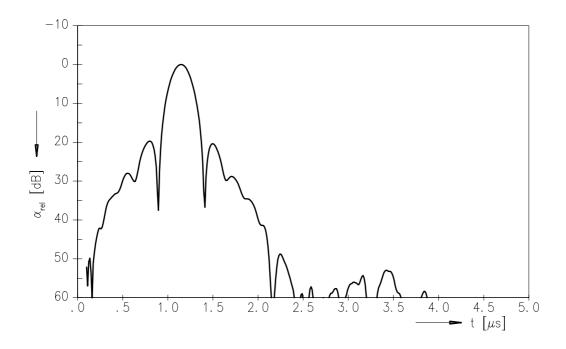
38,90 MHz

Data Sheet

Frequency response M/N mode



Time domain response M/N mode





SAW Components K 7252 M

IF Filter for Intercarrier / Multistandard Applications

38,90 MHz

Data Sheet

Published by EPCOS AG Surface Acoustic Wave Components Division, OFW E UE P.O. Box 80 17 09, D-81617 München

© EPCOS AG 1999. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.