

SAW Components

Data Sheet K 2971 M





SAW Components K 2971 M IF Filter for Intercarrier Applications 38,90 MHz

Data Sheet

Standard

- B/G
- D/K

Features

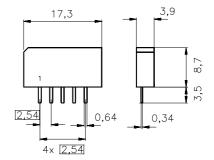
- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 32,40 MHz and 33,40 MHz
- Group delay predistortion

Terminals

■ Tinned CuFe alloy

Plastic package SIP5K

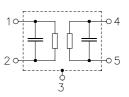




Dimensions in mm, approx. weight 1,0 g

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 2971 M	B39389-K2971-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_{DC}	5	V	between any terminals
AC voltage	$V_{\sf pp}$	10	V	between any terminals



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Characteristics

Reference temperature: $T_{\rm A} = 25\,^{\circ}{\rm C}$ 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		14,8	16,3	17,8	dB
following data								
Relative attenuation				α_{rel}				
Picture carrier		38,90	MHz		4,8	5,8	6,8	dB
Color carrier		34,47	MHz		-0,3	0,7	1,7	dB
Sound carrier		32,40	MHz		17,1	18,6	20,1	dB
		33,40	MHz		17,7	19,2	_	dB
Adjacent picture carrier		30,90	MHz		46,0	56,0		dB
Adjacent sound carrier		40,40	MHz		43,0	52,0	_	dB
		41,40	MHz		42,0	51,0	_	dB
Lower sidelobe	25,00	30,90	MHz		44,0	51,0		dB
Upper sidelobe	40,40	45,00	MHz		40,0	46,0	_	dB
Reflected wave signal	suppressi	on						
1,2 μs 6,0 μs after ma	in pulse				42,0	53,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40	MHz)							
Feedthrough signal su	ppression							
1,2 μs 1,1 μs before r	nain pulse				50,0	56,0	_	dB
(test pulse 250 ns,								
carrier frequency 37,40	MHz)							
Group delay predistort	ion			Δau				
(reference frequency 38	,90 MHz)							
		36,50	MHz		_	-70	_	ns
		34,47	MHz			20		ns
Impedance at 37,40 MH	lz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				_	2,0 12,1	_	$k\Omega \mid\mid pF$	
Output: $Z_{OUT} = R_{OUT} C_{OUT}$					3,0 2,8	_	kΩ pF	
Temperature coefficient of frequency			TC_{f}	_	-72	_	ppm/K	



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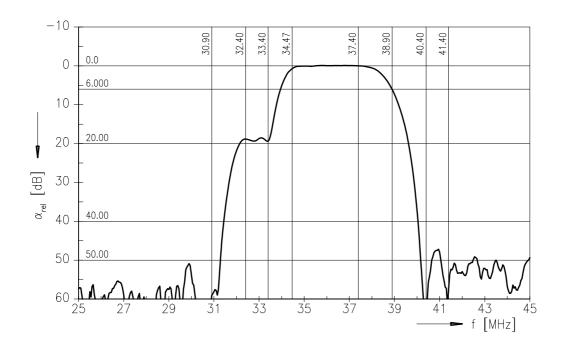
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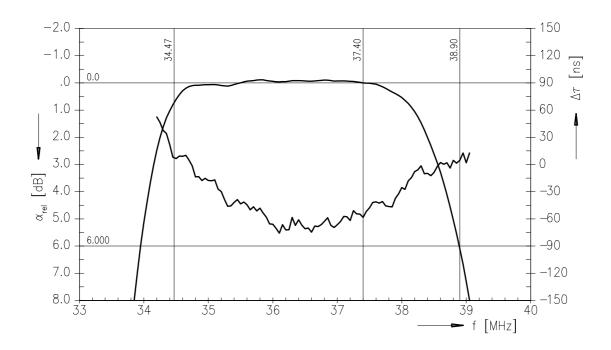
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Frequency response







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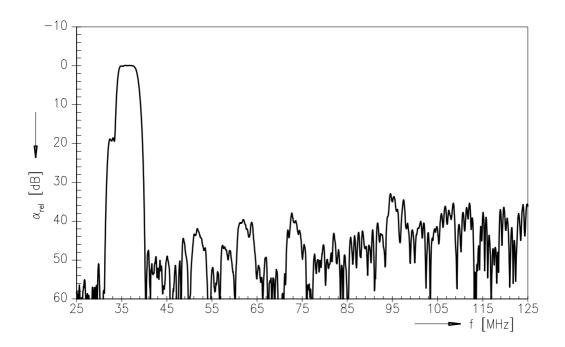
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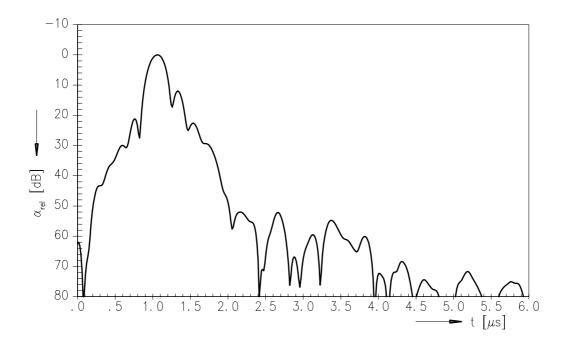
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Frequency response



Time domain response





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