

Data Sheet G 3355 K





SAW Components G 3355 K IF Filter for Quasi/Split Sound Applications 38,90 MHz

Data Sheet

Standard

■ B/G

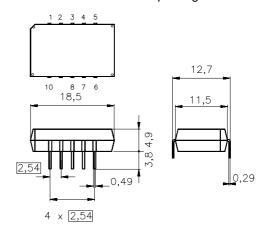
Features

- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression
- Group delay predistortion
- Sound channel with passband only for sound carriers at 33,40 MHz and 33,05 MHz (NICAM)
- Suitable for CENELEC EN 55020

Terminals

■ Tinned CuFe alloy

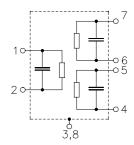
Plastic package **DIP10K**



Dimensions in mm, approx. weight 1,8 g

Pin configuration

- 1 Input
- 2 Input ground
- 3; 8 Chip carrier ground
- 4; 5 Output sound
- 6; 7 Output picture
- 9 Free
- 10 Not connected



Туре	Ordering code	Marking and package according to	Packing according to
G 3355 K	B39389-G3355-K100	C61157-A2-A3	F61074-V8068-Z000

Maximum ratings

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



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Characteristics of picture 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		37,40	MHz		12,5	14,0	15,5	dB
following data								
Relative attenuation				α_{rel}				
Picture carrier		38,90	MHz		5,0	6,0	7,0	dB
Color carrier		34,47	MHz		-0,6	0,4	1,4	dB
Sound carrier		33,40	MHz		30,0	48,0	_	dB
Adjacent picture carrier		30,90	MHz		46,0	60,0	_	dB
		31,90	MHz		48,0	56,0	_	dB
		32,40	MHz		46,0	55,0	<u> </u>	dB
		40,15	MHz		38,0	48,0	_	dB
Adjacent sound carrier		40,40	MHz		46,0	60,0	_	dB
		41,40	MHz		45,0	59,0	_	dB
Lower sidelobe	25,00	31,90	MHz		40,0	46,0	_	dB
Upper sidelobe	40,40	45,00	MHz		40,0	46,0	-	dB
Reflected wave signal	suppres	sion						
1,2 μs 6,0 μs after ma	in pulse				42,0	52,0	_	dB
(test pulse 250 ns, carrier frequency 37,40 MHz)								
Feedthrough signal suppression								
1,2 μs 1,1 μs before n					_	56,0	_	dB
(test pulse 250 ns,					,			
carrier frequency 37,40	MHz)							
Group delay predistort	ion			Δτ				
(reference frequency 38)						
	,	36,30	MHz		_	- 55	_	ns
		34,47	MHz			40	_	ns
Impedance at 37,40 MHz								
		$R_{\rm IN} \parallel C_{\rm II}$			_	1,0 24,4	_	kΩ pF
Output:	$Z_{OUT} =$	$R_{\text{OUT}} \parallel C_0$	DUT		_	1,6 3,9	_	$k\Omega \parallel pF$
Temperature coefficier	nt of fred	quency		TC_{f}	_	-72	_	ppm/K



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Characteristics of sound channel

 $T_{A} = 25 \,^{\circ}\text{C}$ $Z_{S} = 50 \,\Omega$ $Z_{L} = 2 \,\text{k}\Omega \parallel 3 \,\text{pF}$ Reference temperature: Terminating source impedance: Terminating load impedance:

				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the	33,05	MHz		12,7	14,2	15,7	dB
following data							
Relative attenuation			α_{rel}				
Sound carrier	33,40	MHz		1,0	2,0	3,0	dB
Picture carrier	38,90	MHz		42,0	56,0	_	dB
Color carrier	34,47	MHz		28,0	35,0	_	dB
Adjacent picture carrier	30,90	MHz		30,0	37,0	_	dB
	31,90	MHz		32,0	41,0	_	dB
Adjacent sound carrier	40,40	MHz		42,0	53,0	_	dB
	41,40	MHz		42,0	54,0	_	dB
Lower sidelobe	25,00 31,90	MHz		28,0	34,0	_	dB
Upper sidelobe	38,90 45,00	MHz		38,0	46,0	_	dB
Impedance at 33,05 MHz							
Output	$: Z_{OUT} = R_{OUT} \mid\mid C_{O}$	UT		_	4,1 2,6	_	$k\Omega \parallel pF$
Temperature coefficient of frequency			TC_{f}	_	-72	_	ppm/K



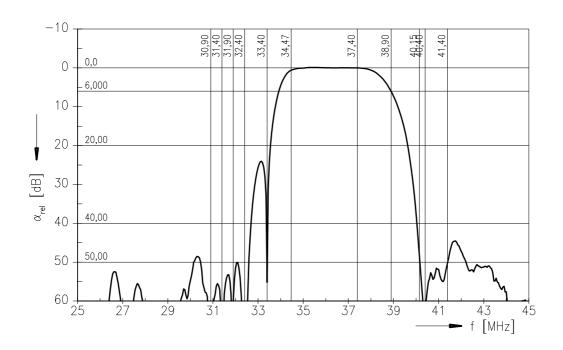
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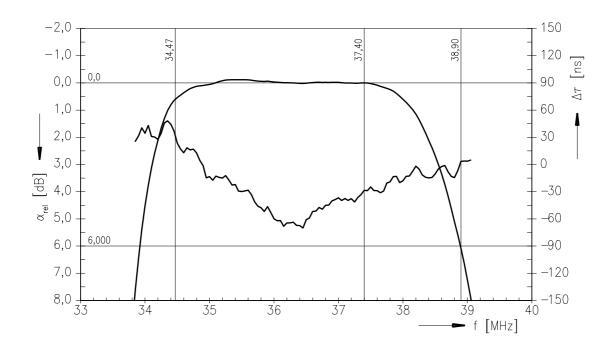
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Frequency response of picture channel







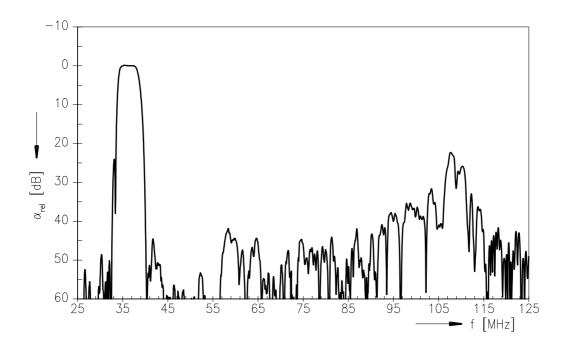
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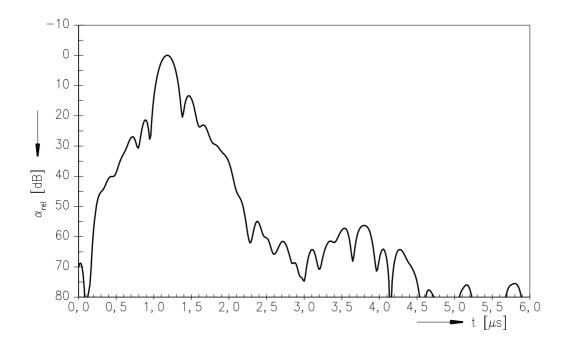
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Frequency response of picture channel



Time domain response of picture channel





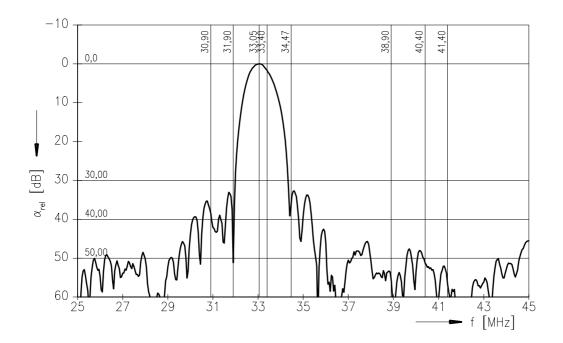
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Frequency response of sound channel





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