

IF Filter for Inter-carrier Applications

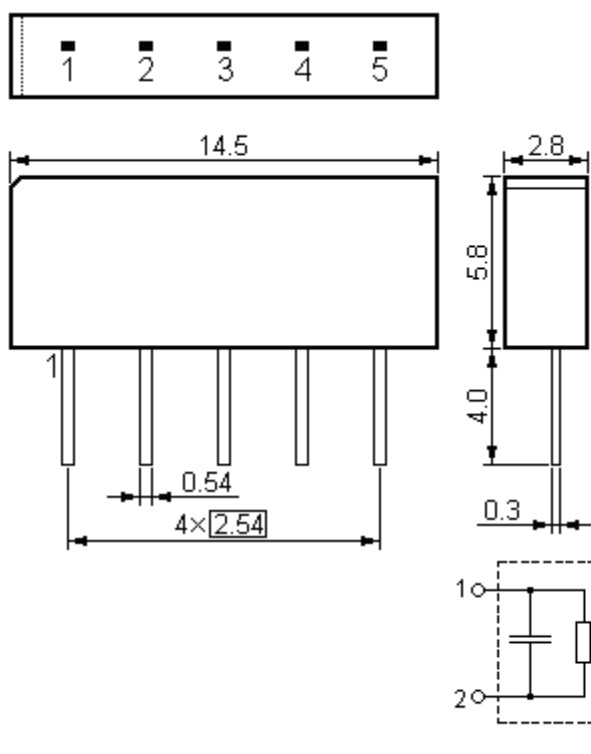
38.90MHz

ACTK7044D/38.90/SIP5D

Features

- n Standard: B/G, D/K
- n TV IF filter with Nyquist slope and sound shelf
- n Broad sound shelf for sound carriers at 32.40 MHz and 33.40 MHz
- n Group delay pre-distortion

Package Dimension



Pin Configuration

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

Plastic Package **SIP5D**
 Unit: mm

Performance

Maximum Ratings

Rating		Value	Unit
Operable Temperature Range	T_A	-25 to +65	°C
Storage Temperature Range	T_{stg}	-40 to +85	°C
DC Voltage (between any terminals)	V_{DC}	12	V
AC Voltage (between any terminals)	V_{PP}	10	V

In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

ISO9001: 2000 Registered - Registration number 6830/2

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

Issue : 1 C1

Date : SEPT 04

Electronic Characteristics

Reference temperature: $T_A = 25\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\text{ }\Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

Item		min.	typ.	max.	Unit
Insertion attenuation	IL				
Reference level for the following data	37.40 MHz	15.7	17.2	18.7	dB
Relative attenuation	α_{rel}				
Picture carrier	38.90 MHz	4.0	5.0	6.0	dB
Colour carrier	34.47 MHz	2.5	3.5	4.5	dB
Sound carrier	32.40 MHz	18.5	20.0	21.5	dB
	33.40 MHz	19.5	21.0	—	dB
Adjacent picture carrier	30.90 MHz	46.0	64.0	—	dB
Adjacent sound carrier	40.40 MHz	38.0	50.0	—	dB
	41.40 MHz	32.0	45.0	—	dB
Lower sidelobe	25.00 ... 30.90 MHz	33.0	43.0	—	dB
Upper sidelobe	40.40 ... 45.00 MHz	32.0	40.0	—	dB
Reflected wave signal suppression					
1.2 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 37.40 MHz)		42.0	54.0	—	dB
Feed-through signal suppression					
1.2 μs ... 1.1 μs before main pulse (test pulse 250 ns, carrier frequency 37.40 MHz)		50.0	56.0	—	dB
Group delay pre-distortion	Δt				
(reference frequency 38.90 MHz)					
	36.50 MHz	—	−65	—	ns
	34.47 MHz	—	0	—	ns
Temperature coefficient of frequency	TC_f	—	−72	—	ppm/K

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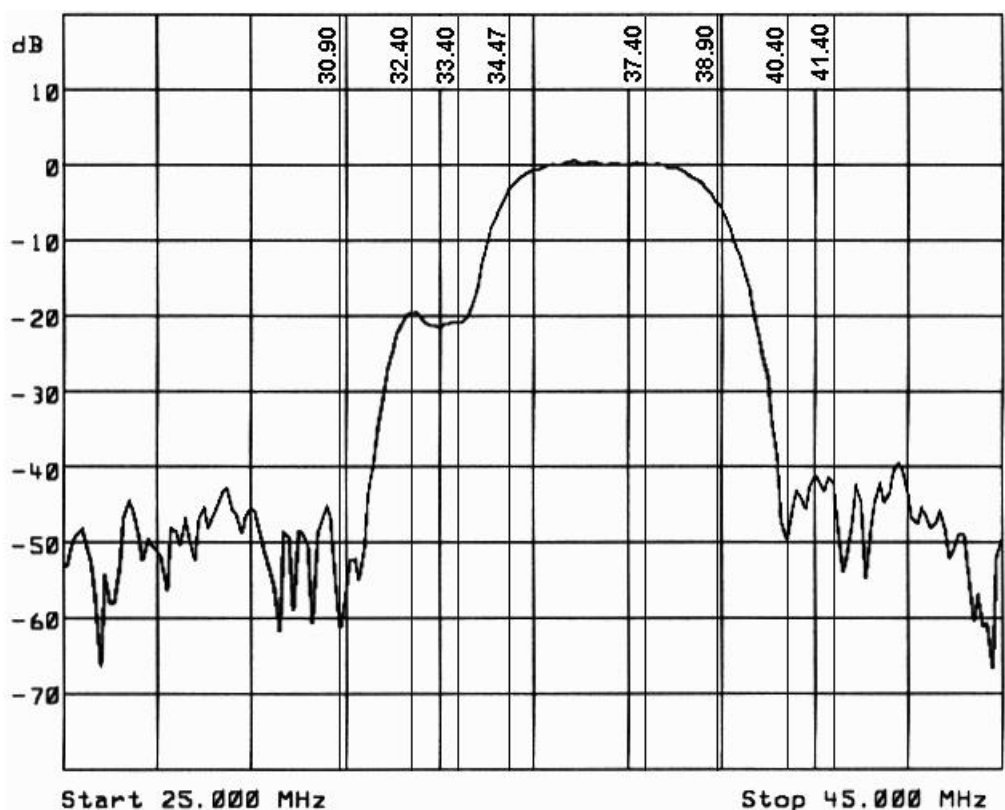
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Frequency Response



ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

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