

Bandpass Filter for Digital Cable Applications

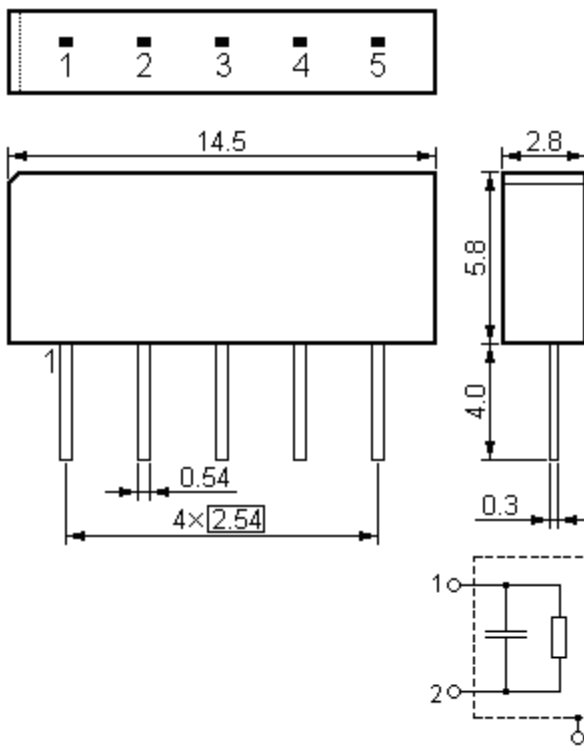
44.00MHz

ACTX3034D/44.0/SIP5D

Features

- n IF filter for digital cable TV
- n Plastic Package

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}	5	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

Issue : 1 C1

For quotations or further information please contact us at:

Date : SEPT 04

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

<http://www.actcrystals.com>

Electronic Characteristics

Reference temperature: $T_A = 25 (45) ^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

Item		min.	typ.	max.	Unit
Centre frequency (Centre between 3 dB points)	f_c	—	(44.00)	—	MHz
Insertion attenuation Reference level for the following data	IL 44.06 (44.00) MHz	13.2	14.7	16.2	dB
Pass bandwidth $\alpha_{rel} \leq 3 \text{ dB}$	$BW_{3\text{dB}}$	—	6.0	—	MHz
$\alpha_{rel} \leq 30 \text{ dB}$	$BW_{30\text{dB}}$	—	7.7	—	MHz
Amplitude ripple	$\Delta\alpha$ 41.53 ... 46.59 MHz	—	0.5	—	dB
Relative attenuation	α_{rel}				
	41.53 (41.47) MHz	—	0.8	—	dB
	46.59 (46.53) MHz	—	0.5	—	dB
	41.06 (41.00) MHz	2.0	3.2	4.4	dB
	47.06 (47.00) MHz	1.2	2.4	3.6	dB
	47.31 (47.25) MHz	—	8.3	—	dB
	39.81 (39.75) MHz	30.0	40.0	—	dB
Lower sidelobe					
	35.06 ... 39.46 (35.00 ... 39.40) MHz	36.0	43.0	—	dB
	39.46 ... 40.06 (39.40 ... 40.00) MHz	32.0	40.0	—	dB
Upper sidelobe					
	48.06 ... 50.06 (48.00 ... 50.00) MHz	30.0	35.0	—	dB
	50.06 ... 55.06 (50.00 ... 55.00) MHz	31.0	42.0	—	dB
Group delay ripple (p-p)	Δt 41.53 ... 46.59 MHz	—	30	—	ns
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

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

