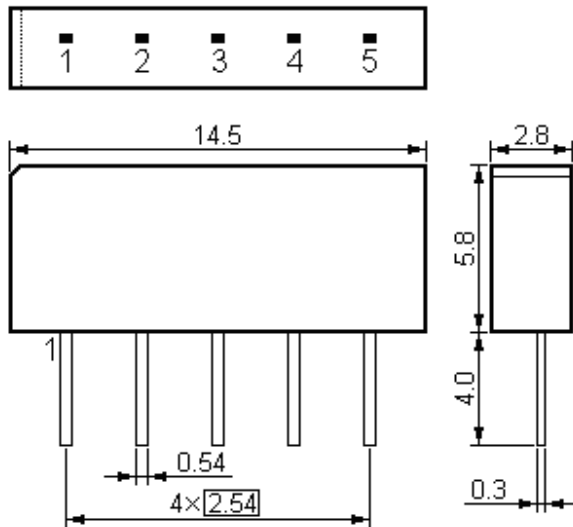


Bandpass Filter for Digital Cable Applications

Features

- IF filter for digital cable TV
- 3 dB bandwidth: 6.0 MHz
- Plastic Package

Package Dimension Configuration



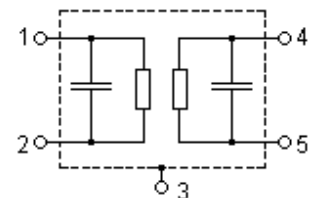
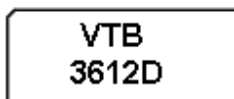
Pin

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

Plastic Package **SIP5D**

Unit: mm

Marking



Performance

Maximum Ratings

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

SAW Filter

SVTB3612D

SBTRON

Electronic Characteristics

Reference temperature: $T_A = 25\text{ °C}$ 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
Center frequency (Center between 3 dB points)	f_C	—	36.125	—	MHz
Insertion attenuation Reference level for the following data	IL 36.13 MHz	16.0	17.5	19.0	dB
Pass bandwidth $\alpha_{rel} \leq 3\text{ dB}$	BW_{3dB}	5.8	6.0	6.2	MHz
$\alpha_{rel} \leq 30\text{ dB}$	BW_{30dB}	7.4	7.6	7.8	MHz
Relative attenuation	α_{rel}				
	33.59 MHz	-0.4	0.8	2.0	dB
	38.65 MHz	-1.0	0.2	1.4	dB
	33.12 MHz	1.8	3.0	4.2	dB
	39.12 MHz	1.1	2.3	3.5	dB
Lower sidelobe	25.00 ... 32.12 MHz	25.0	30.0	—	dB
Upper sidelobe	40.12 ... 41.42 MHz	26.0	33.0	—	dB
	41.42 ... 45.00 MHz	28.0	35.0	—	dB
Reflected wave signal suppression 1.3 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 36.13 MHz)		42.0	52.0	—	dB
Feedthrough signal suppression 1.3 μs ... 1.2 μs before main pulse (test pulse 250 ns, carrier frequency 36.13 MHz)		50.0	56.0	—	dB
Group delay ripple (p-p)	$\Delta\tau$ 32.12 ... 39.12 MHz	—	40	—	ns
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

Frequency Response

