

SAW Filter

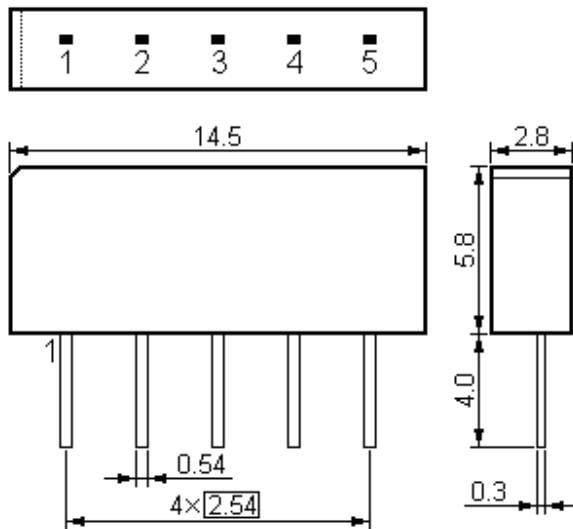
VTF4502D

IF Filter for Intercarrier Applications

Features

- Standard: M/N
- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Constant group delay
- Plastic Package

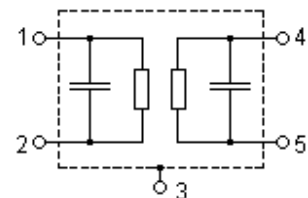
Package Dimension Configuration



- 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}				

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Electronic Characteristics

Reference temperature: $T_A = 25 (45) \text{ }^\circ\text{C}$

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	44.06 (44.00) MHz	11.0	12.5	14.0	dB
Relative attenuation	α_{rel}				
Picture carrier	45.81 (45.75) MHz	4.6	5.6	6.6	dB
Color carrier	42.23 (42.17) MHz	0.1	1.0	2.0	dB
	41.98 (41.92) MHz	—	2.0	—	dB
	41.73 (41.67) MHz	—	5.5	—	dB
Sound carrier	41.31 (41.25) MHz	15.7	17.2	18.7	dB
Adjacent picture carrier	39.81 (39.75) MHz	42.0	55.0	—	dB
Adjacent sound carrier	47.31 (47.25) MHz	30.0	42.0	—	dB
Lower sidelobe					
	35.06 ... 39.81 (35.00 ... 39.75) MHz	36.0	44.0	—	dB
Upper sidelobe					
	47.31 ... 55.06 (47.25 ... 55.00) MHz	30.0	40.0	—	dB
Group delay ripple (p-p)	$\Delta \tau$	—	40	—	ns
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

Frequency Response

