

SAW Filter

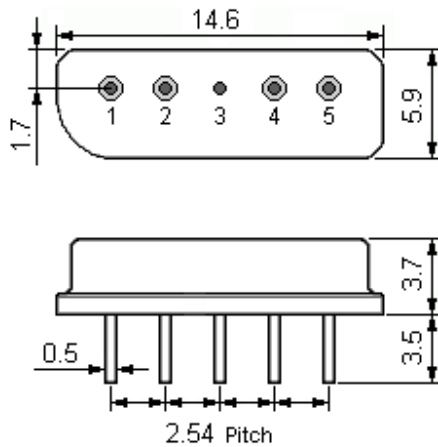
VTF238901D

IF Filter for Intercarrier Applications

Features

- Standard: B/G, D/K
- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 32.40 MHz and 33.40 MHz
- Group delay predistortion
- 5-lead, low-profile metal case

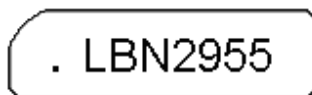
Package Dimension Configuration



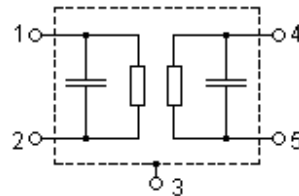
- Pin
- 1 Input
 - 2 Input - ground
 - 3 Chip carrier - ground
 - 4 Output
 - 5 Output

Unit: mm

Marking



: The dot indicates pin 1.



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}				

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
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
Color 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 μ s ... 6.0 μ s after main pulse (test pulse 250 ns, carrier frequency 37.40 MHz)		42.0	54.0	—	dB
Feedthrough signal suppression					
1.2 μ s ... 1.1 μ s before main pulse (test pulse 250 ns, carrier frequency 37.40 MHz)		50.0	56.0	—	dB
Group delay predistortion	$\Delta\tau$				
(reference frequency 38.90 MHz)					
	36.50 MHz	—	-65	—	ns
	34.47 MHz	—	0	—	ns
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

Frequency Response

