



Siemens Matsushita Components

SAW Components

IF Filter for Audio Applications

L 9453 M
33,90 MHz and 38,90 MHz

Data Sheet
Standard

Plastic package **SIP5K**

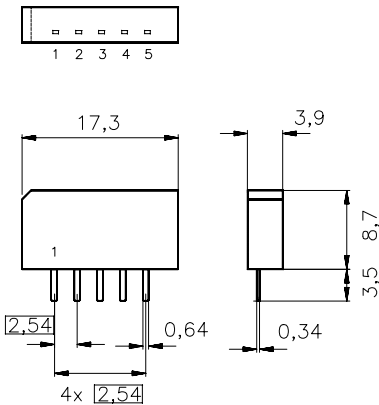
- L/L'

Features

- TV IF audio filter with two channels
- Channel 1 (L') with pass band for sound carrier at 40,40 MHz
- Channel 2 (L) with pass band for sound carrier at 32,40 MHz

Terminals

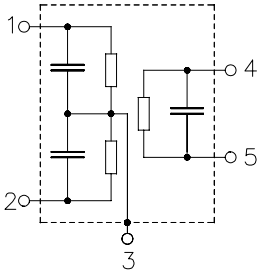
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 g

Pin configuration

- | | |
|---|--------------------------------|
| 1 | Input channel 1 / Input ground |
| 2 | Input ground / Input channel 2 |
| 3 | Chip carrier - ground |
| 4 | Output |
| 5 | Output |



Type	Ordering code	Marking and package according to	Packing according to
L 9453 M	B39389-L9453-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operable temperature range	T_A	- 25/+ 65	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	12	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals



Siemens Matsushita Components

SAW Components

IF Filter for Audio Applications

L 9453 M
33,90 MHz and 38,90 MHz

Data Sheet

Characteristics of channel 1

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

		min.	typ.	max.	
Insertion attenuation α					
Reference level for the following data	40,40 MHz	13,4	14,9	16,4	dB
Relative attenuation α_{rel}					
Picture carrier	33,90 MHz	42,0	52,0	—	dB
	38,40 MHz	38,0	45,0	—	dB
Adjacent picture carrier	41,90 MHz	34,0	40,0	—	dB
Adjacent sound carrier	32,40 MHz	38,0	48,0	—	dB
Lower sidelobe	25,00 ... 38,40 MHz	37,0	45,0	—	dB
Upper sidelobe	41,90 ... 45,00 MHz	30,0	38,0	—	dB
Impedance at 40,40 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	0,8 $\parallel$ 8,1	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	2,4 $\parallel$ 5,1	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



Siemens Matsushita Components

SAW Components

IF Filter for Audio Applications

L 9453 M
33,90 MHz and 38,90 MHz

Data Sheet

Characteristics of channel 2

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

		min.	typ.	max.	
Insertion attenuation α					
Reference level for the following data	32,40 MHz	12,7	14,2	15,7	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	38,0	45,0	—	dB
	34,40 MHz	32,0	37,0	—	dB
Adjacent picture carrier	30,90 MHz	36,0	42,0	—	dB
Adjacent sound carrier	40,40 MHz	36,0	42,0	—	dB
Lower sidelobe	25,00 ... 30,60 MHz	35,0	42,0	—	dB
Upper sidelobe	34,40 ... 45,00 MHz	31,0	36,0	—	dB
Impedance at 32,40 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,2 $\parallel$ 8,5	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	3,3 $\parallel$ 5,6	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



Siemens Matsushita Components

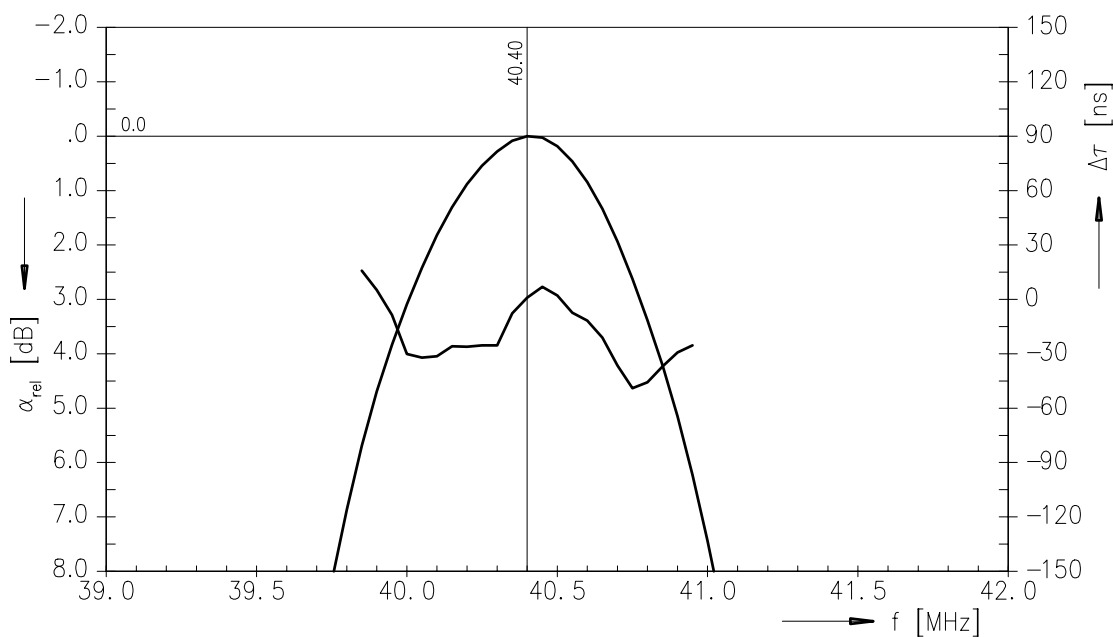
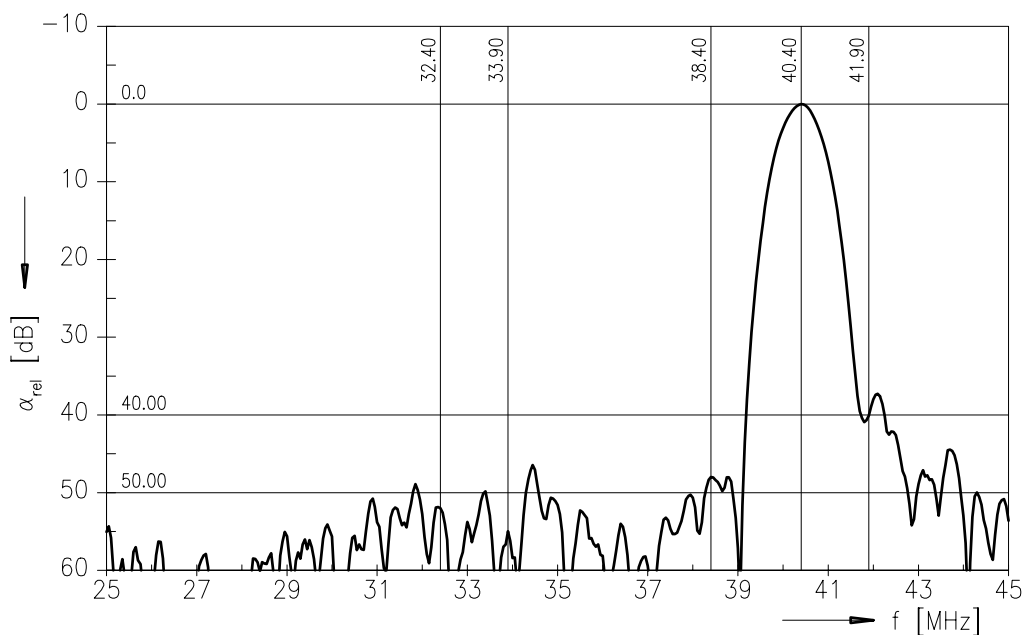
SAW Components

IF Filter for Audio Applications

L 9453 M
33,90 MHz and 38,90 MHz

Data Sheet

Frequency response of channel 1





Siemens Matsushita Components

SAW Components

IF Filter for Audio Applications

L 9453 M
33,90 MHz and 38,90 MHz

Data Sheet

Frequency response of channel 2

