EPCOS

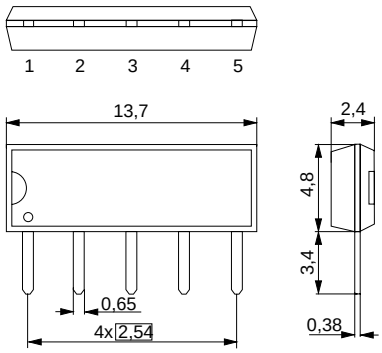
SAW Components

Data Sheet X 6855 D

Duroplast package **SIP5D**

Features

- IF filter for digital TV
- Standard IC package
- Unbalance input option



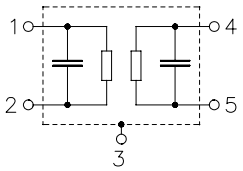
Terminals

- Tinned CuFe alloy

Dimensions in mm, approx. weight 0,5 g

Pin configuration

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



Type	Ordering code	Marking and package according to	Packing according to
X 6855 D	B39440-X6855-N201	C61157-A1-A21	F61074-V8049-Z000

Maximum ratings

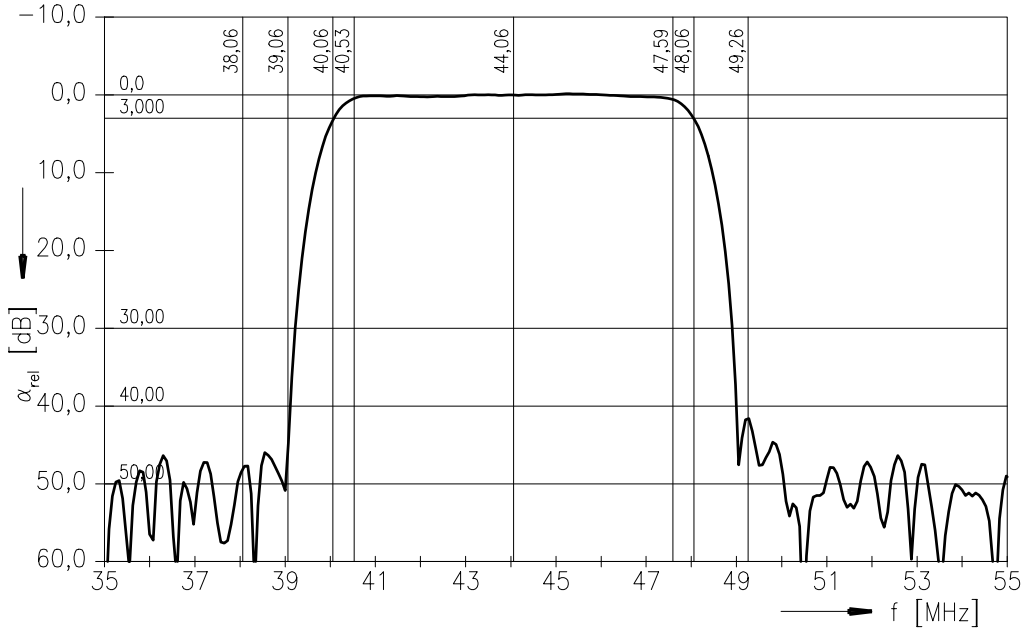
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

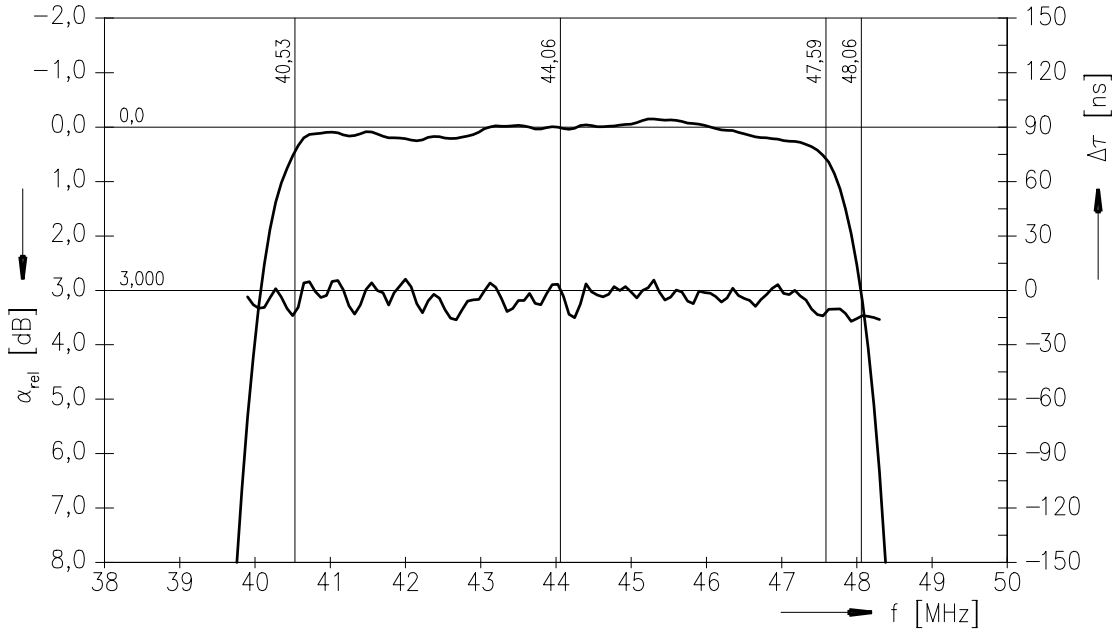
Characteristics

Reference temperature: T_A = 25 (45) ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

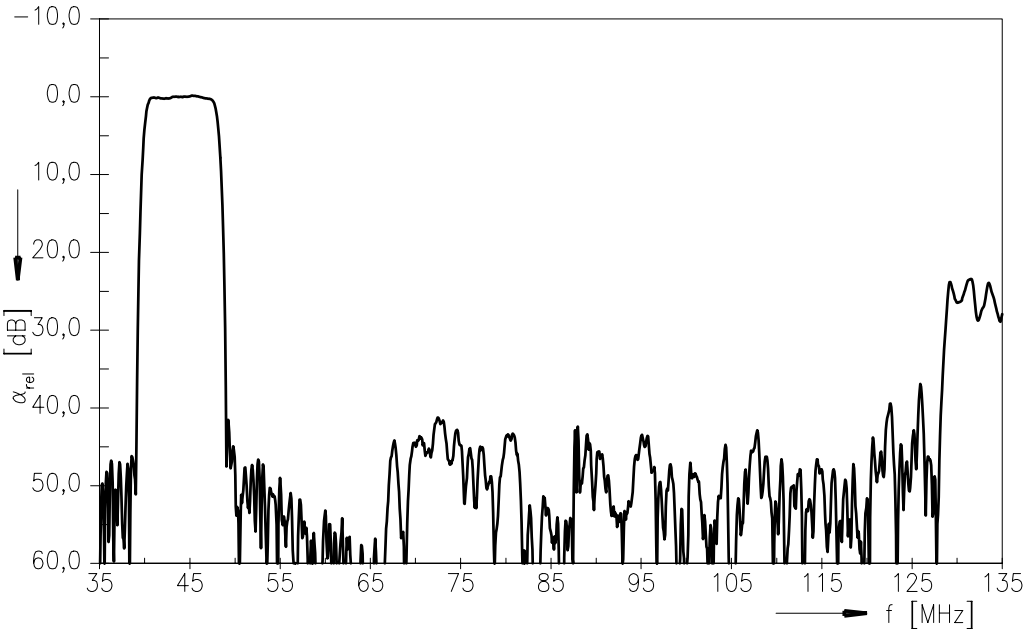
		min.	typ.	max.	
Center Frequency (center between 3dB points)	f_c	—	44,00	—	
Insertion attenuation	α				
Reference level for the following data 44,06 (44,00) MHz		15,8	17,3	18,8	dB
Pass bandwidth					
$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	7,9	—	MHz
$\alpha_{rel} \leq$ 30 dB	B_{30dB}	—	9,6	—	MHz
Relative attenuation	α_{rel}				
40,53 (40,47) MHz		—	–0,2	—	dB
47,59 (47,53) MHz		—	1,3	—	dB
40,06 (40,00) MHz		1,2	2,4	—	dB
48,06 (48,00) MHz		2,8	4,0	—	dB
Lower sidelobe					
35,06 ... 38,06 (35,00 ... 38,00) MHz		40,0	46,0	—	dB
38,06 ... 39,06 (38,00 ... 39,00) MHz		36,0	44,0	—	
Upper sidelobe					
49,06 ... 50,26 (49,00 ... 50,20) MHz		35,0	41,0	—	
50,26 ... 55,06 (50,20 ... 55,00) MHz		40,0	48,0	—	
Reflected wave signal suppression 1,2 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		42,0	54,0	—	dB
Feedthrough signal suppression 1,3 µs ... 1,2 µs before main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	Δτ				
40,06 ... 48,06 (40,00 ... 48,00) MHz		—	50	—	ns
Impedance at 44,06 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	2,0 ‖ 17,0	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,6 ‖ 4,5	—	kΩ || pF
Temperature coefficient of frequency	TC_f	—	–72	—	ppm/K

Frequency response

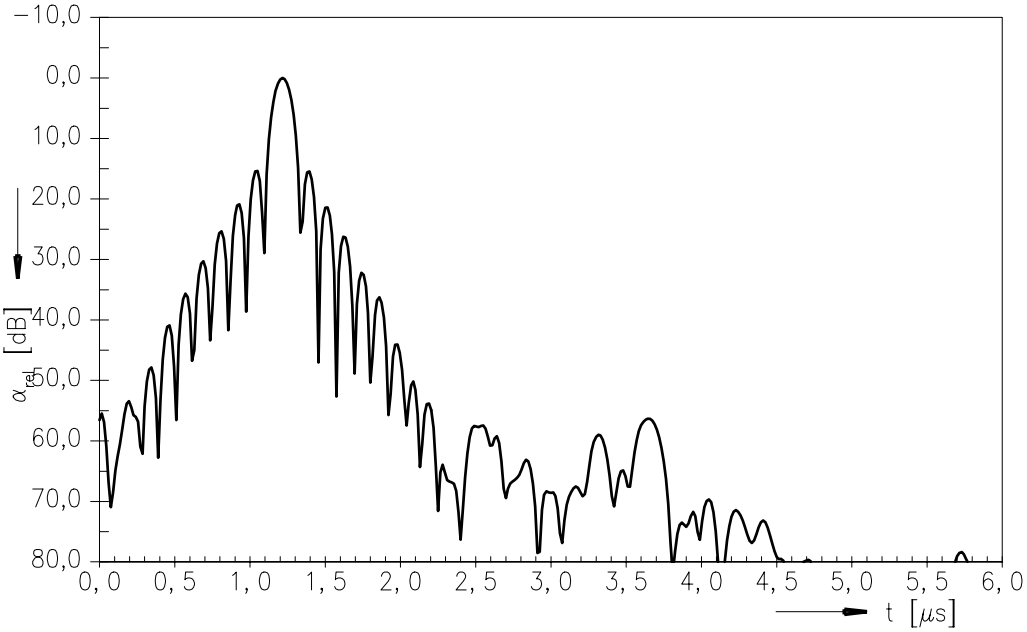




Frequency response



Time domain response



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