



# SAW Components

Data Sheet X 6855 D





**SAW Components**

**X 6855 D**

**Bandpass Filter**

**44,00 MHz**

**Data Sheet**

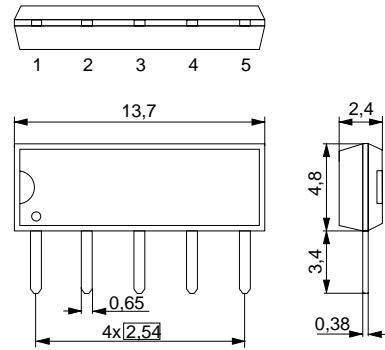
Duroplast package **SIP5D**

**Features**

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

**Terminals**

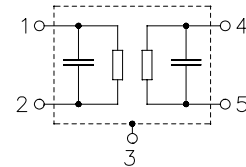
- Tinned CuFe alloy



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



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**Characteristics**

Reference temperature:  $T_A = 25 (45) \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center Frequency</b>	$f_c$	—	44,00	—	
(center between 3dB points)					
<b>Insertion attenuation</b>	$\alpha$				
Reference level for the following data	44,06 (44,00) MHz	15,8	17,3	18,8	dB
<b>Pass bandwidth</b>					
$\alpha_{rel} \leq 3 \text{ dB}$	$B_{3dB}$	—	7,9	—	MHz
$\alpha_{rel} \leq 30 \text{ dB}$	$B_{30dB}$	—	9,6	—	MHz
<b>Relative attenuation</b>	$\alpha_{rel}$				
	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
<b>Lower sidelobe</b>					
	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	—	
<b>Upper sidelobe</b>					
	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	—	
<b>Reflected wave signal suppression</b>					
1,2 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		42,0	54,0	—	dB
<b>Feedthrough signal suppression</b>					
1,3 $\mu\text{s}$ ... 1,2 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
40,06 ... 48,06 (40,00 ... 48,00) MHz		—	50	—	ns
<b>Impedance at 44,06 MHz</b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	2,0 $\parallel$ 17,0	—	k $\Omega$ $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,6 $\parallel$ 4,5	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



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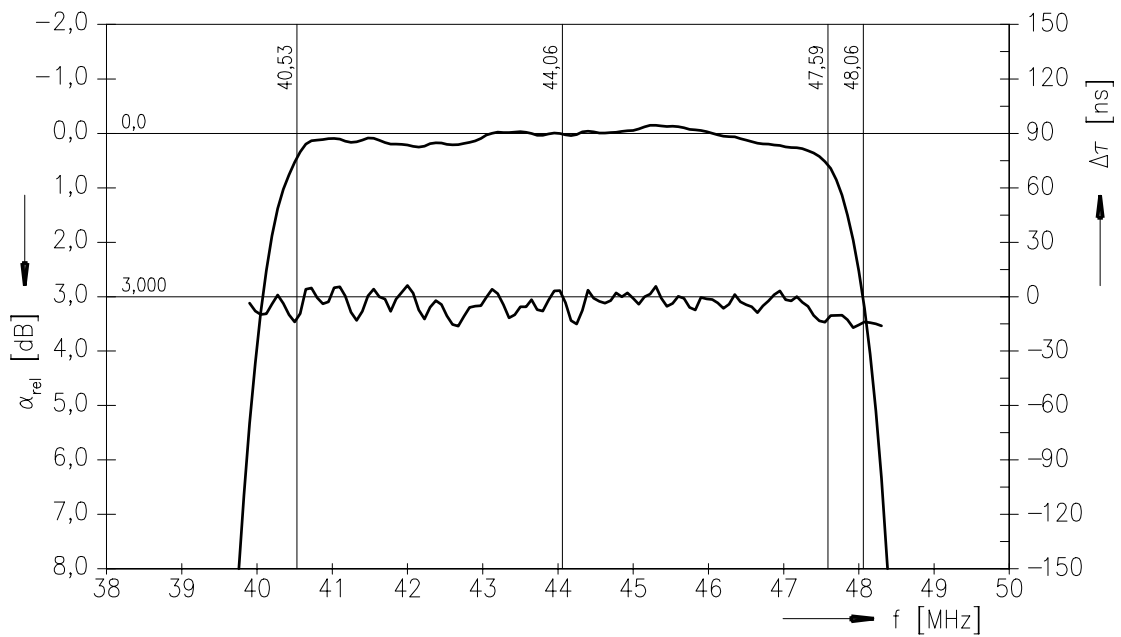
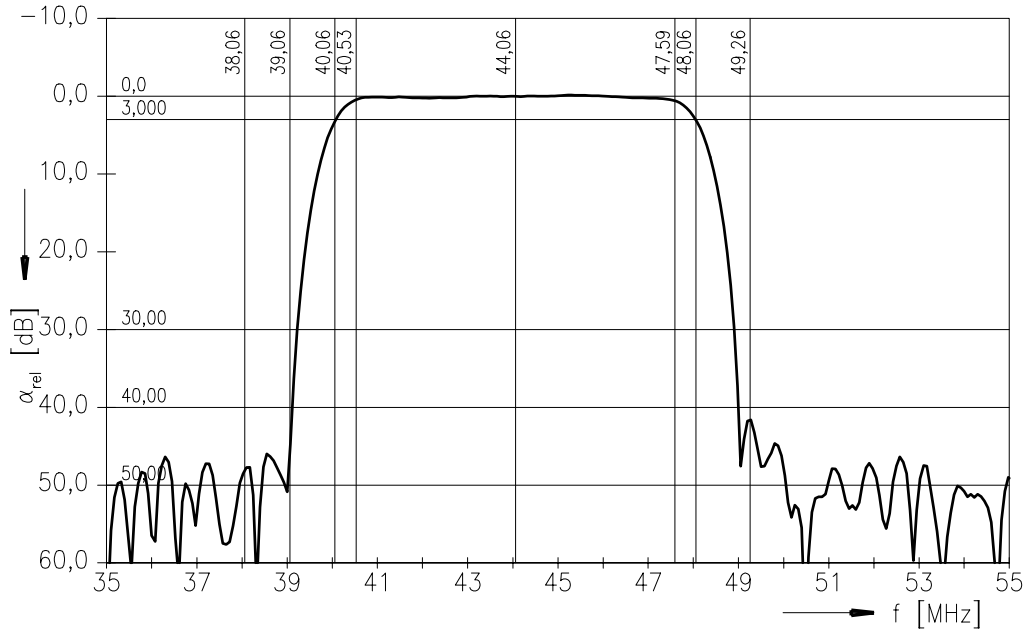
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Frequency response





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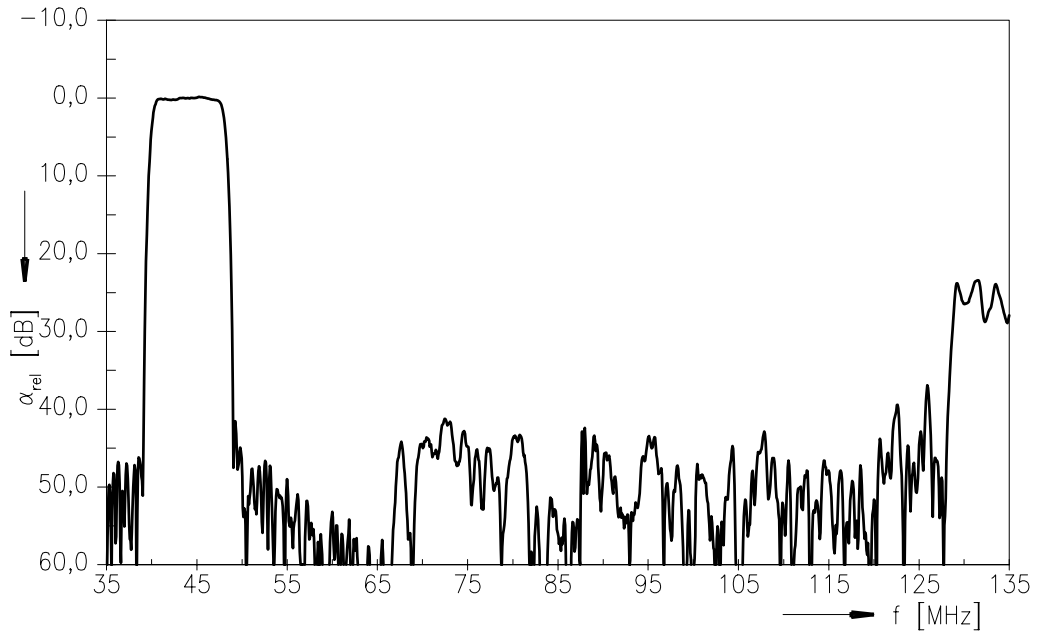
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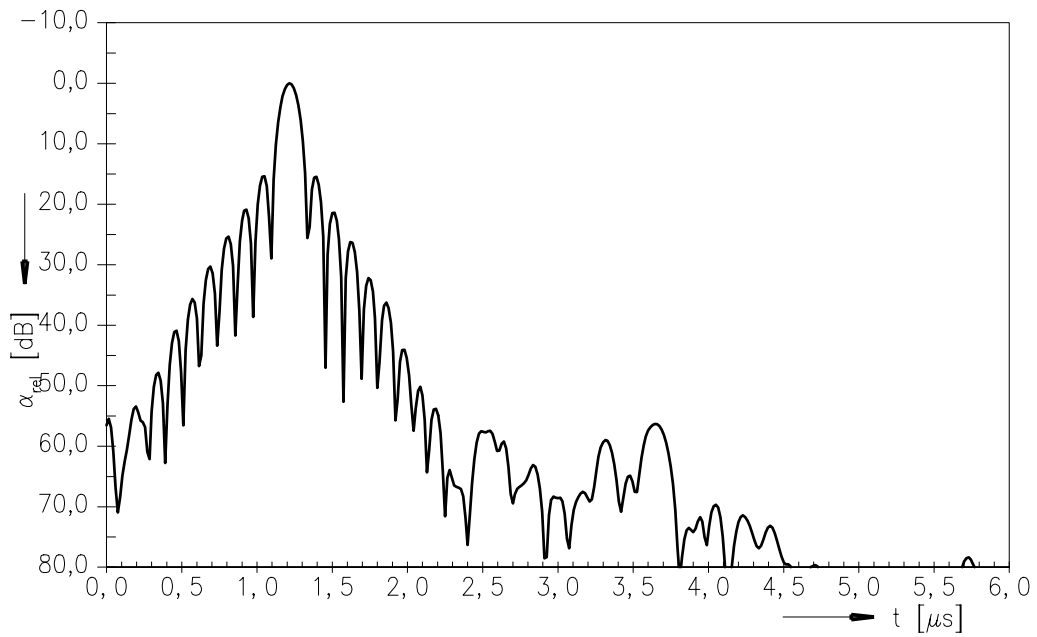
44,00 MHz

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Frequency response



Time domain response





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